

CONFERENCE PROGRAMME & ABSTRACT BOOK

The 17th Asian Conference on Education (ACE2025)

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November 23-28, 2025 | Tokyo, Japan, and Online

Organised by the International Academic Forum (IAFOR) in partnership with the IAFOR Research Centre at the Osaka School of International Public Policy (OSIPP) at The University of Osaka, Japan, and IAFOR's Global Partners.

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IAFOR Partners



















































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Letter of Welcome



日本へようこそ！東京へようこそ！
Nihon e yōkoso! Tōkyō e yōkoso!
Welcome to Japan! Welcome to Tokyo!

Dear Friends and Colleagues,

It gives me enormous pleasure to welcome you to the 17th annual Asian Conference on Education in the great city of Tokyo, where hundreds of scholars and educators from around the world will join us in what promises to be a remarkable week of engagement and energy.

This conference has attracted some 800 registrants from some 65 countries, which makes it the biggest ever ACE in its seventeen-year history. As the conference continues to cement its reputation as IAFOR's flagship home event, it remains a fantastic place and space for the international, intercultural, and interdisciplinary engagement and exchange at the heart of our mission.

I am struck by the convivial and positive nature of IAFOR members and conference attendees, and in their openness of their participation. Our conferences are incredibly important spaces for holding challenging and rigorous discussions in a positive atmosphere, encouraging meetings of minds across the borders of nation, culture, and discipline, and providing a unique comparative and contrastive laboratory for educators.

So how do you ace ACE? Education is a lifelong journey, and one impossible to accomplish alone; we have so much to learn from each other, and so much we can teach each other. Whatever your age or experience, you will need to wear both learner and teacher hats throughout the event, as we are living in fast moving times. We need each other as helpers and guides, and as mentors and teachers, to help make sense of the world and in turn help both ourselves and our students.

To this end, I encourage you to make new friends, seek new research synergies and paths, start as many conversations as possible, and engage fully throughout the conference.

Warmest regards,



Dr Joseph Haldane
Chairman & CEO, The International Academic Forum (IAFOR)

Professor, European Center for Peace and Development (ECPD), United Nations University for Peace
Guest Professor, Osaka School of International Public Policy, The University of Osaka, Japan
Visiting Professor, Doshisha University, Japan
Visiting Professor, The University of Belgrade, Serbia
Honorary Professor, University College London (UCL), United Kingdom
Member, Expert Network, World Economic Forum



Become an IAFOR Member

IAFOR provides an enriching personal and professional environment for academics and scholars of all ages and backgrounds to exchange and contribute to interdisciplinary and intercultural dialogue that informs and is informed by their own cultural and disciplinary background and experiences. We are able to do this thanks to our extraordinary network of individuals and institutions around the world who support our work and help shape our events globally. We particularly emphasise the nurturing and support for emerging academics from an array of different backgrounds, and aim to provide opportunities for them to seek advice, support and guidance, as well as offering mid-career and more established academics opportunities to forge working relationships beyond their traditional disciplinary ambitions.

In our current world where division and strife are often reinforced and played out in national and local contexts, and political posturing frequently seeks to ostracise and demonise, IAFOR is committed to working across cultural and national borders, and to work to bring people together through dialogue. We believe that mature human interaction and academic and cultural exchange are essential to offering positive versions of the future, where cooperation happens between individuals and institutions who share a commitment to listen, to reach out and bridge divides, and to contribute to good global citizenship, and to making the world a better place.

By becoming a member of IAFOR, you will become part of an extraordinary network and a stakeholder in shaping the IAFOR mission and facilitating international exchange, encouraging intercultural awareness, and promoting interdisciplinary discussion in the hope and expectation of generating and sharing new knowledge. Join us now in this growing global organisation, and help make a difference today.

To learn more about IAFOR membership, please visit:

iafor.org/membership

ACE2025 Key Statistics

Date of Creation: October 27, 2025

international intercultural interdisciplinary

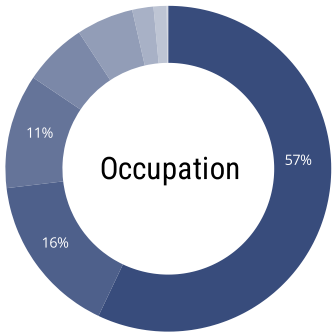
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736 DELEGATES FROM 65 COUNTRIES

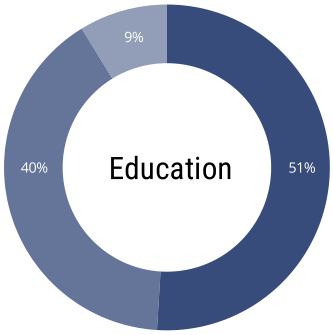
438 Onsite Presentations

180 Online Presentations

435 Institutions and Organisations



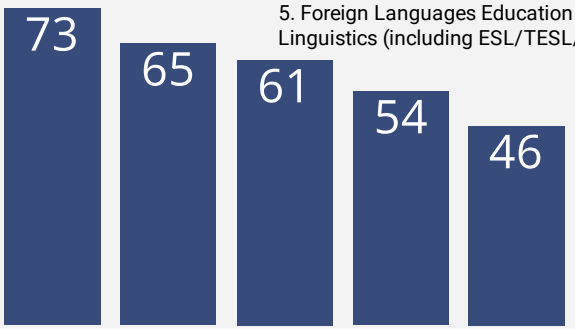
57% University Faculty
16% Doctoral Student
11% Public Sector/Practitioner
6% Other
6% Postgraduate Student
2% Postdoctoral Fellow/Instructor
1% Independent Scholar
1% Private Sector



51% Doctoral Degree
40% Masters Degree
9% Bachelors Degree

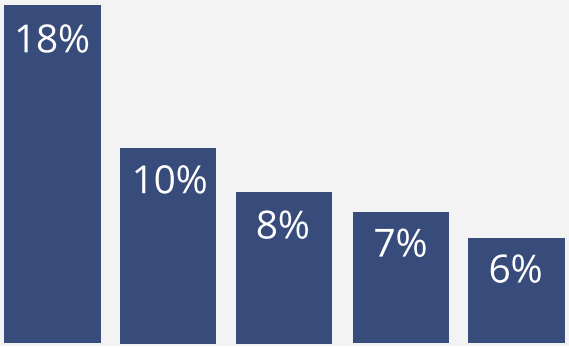
Top Streams

1. Design, Implementation & Assessment of Innovative Technologies in Education (73)
2. Teaching Experiences, Pedagogy, Practice & Praxis (65)
3. Higher Education (61)
4. Learning Experiences, Student Learning & Learner Diversity (54)
5. Foreign Languages Education & Applied Linguistics (including ESL/TESL/TEFL) (46)



Top Countries by Delegate Attendance

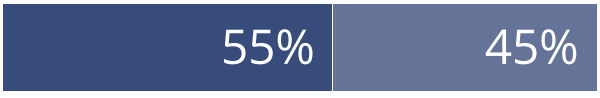
1. Philippines (18%)
2. Taiwan (10%)
3. Singapore (8%)
4. Japan (7%)
5. United States (6%)



618 Total Presentations

277 Hours of Content

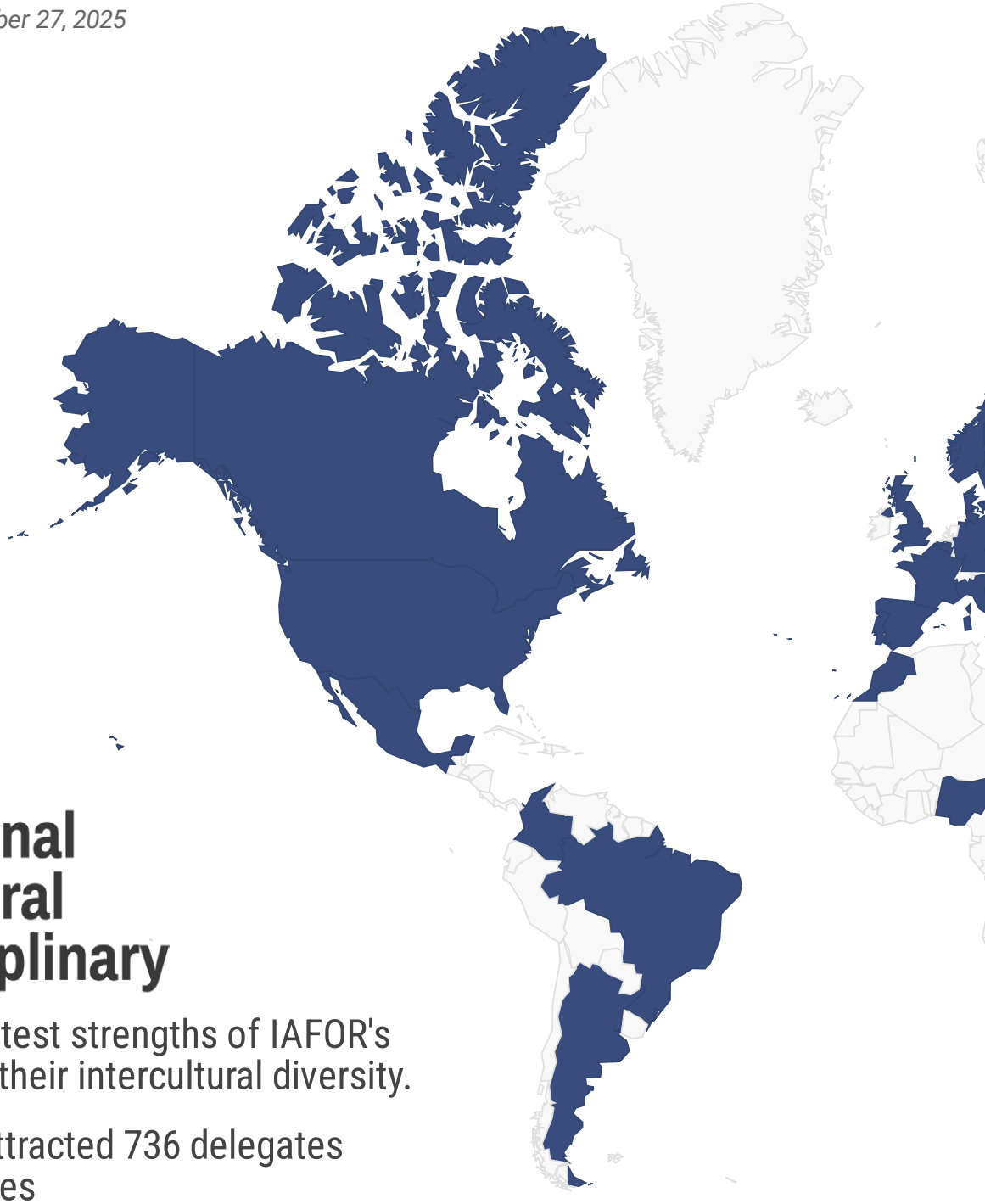
Multiple Authored vs. Single Authored Submissions



international | intercultural | interdisciplinary

Inspiring Global Collaborations

Date of Creation: October 27, 2025



international intercultural interdisciplinary

One of the greatest strengths of IAFOR's conferences is their intercultural diversity.

ACE2025 has attracted 736 delegates from 65 countries

Philippines	138	India	17	Turkey	6
Taiwan	80	Australia	15	Kazakhstan	5
Singapore	62	Vietnam	13	Sri Lanka	5
Japan	54	Qatar	12	France	4
United States	43	United Arab Emirates	10	Latvia	4
Thailand	31	Saudi Arabia	9	Cambodia	3
Indonesia	27	Germany	8	Denmark	3
China	21	Mexico	8	Finland	3
Canada	20	South Africa	8	Nigeria	3
South Korea	20	United Kingdom	8	Russia	3
Hong Kong	19	Italy	7	Armenia	2
Malaysia	19	New Zealand	6	Bangladesh	2

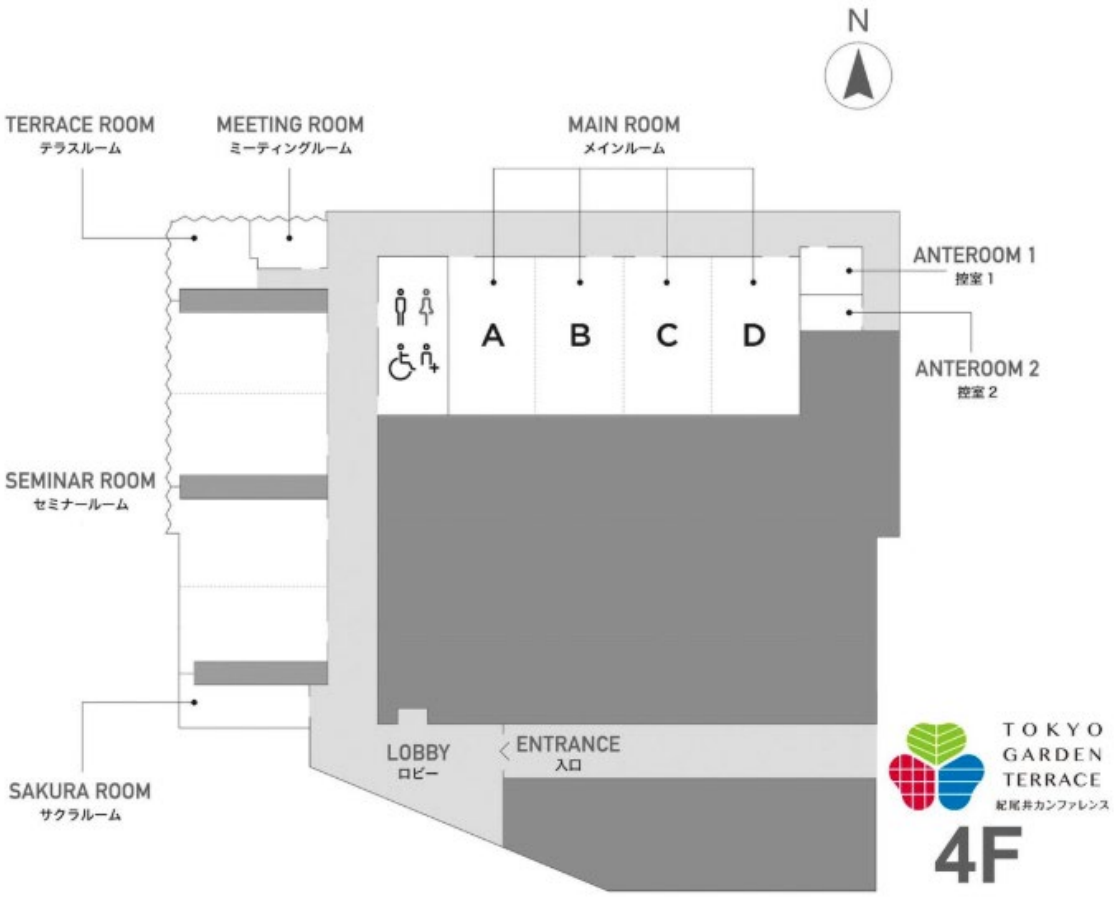


Brazil	2	Brunei	1	Pakistan	1
Hungary	2	Colombia	1	Portugal	1
Israel	2	Czech Republic	1	Sweden	1
Kuwait	2	Ethiopia	1	Uganda	1
Myanmar	2	Greece	1	Ukraine	1
Nepal	2	Guam (USA)	1		
Oman	2	Lithuania	1		
Slovakia	2	Macau	1		
Spain	2	Malta	1	**Total Attendees**	736
Argentina	1	Mongolia	1	**Total Onsite Presentations**	438
Belgium	1	Morocco	1	**Total Online Presentations**	180
Bhutan	1	Norway	1	**Total Countries**	65

Conference Venue: Monday, November 24

Tokyo Garden Terrace Kioicho Conference Center

Address: Kioicho 1-4, Chiyoda Ku, Tokyo



Conference Venue: Monday, November 24

Tokyo Garden Terrace Kioicho Conference Center

Suggested Lunch Options and Local Amenities

Please note that lunch is not provided. This map offers suggestions on where you can eat around the conference venue, as well as the locations of local amenities.



Restaurants & Cafes



Tokyo Halal Deli & Café

Type: Halal Restaurant
Walking Distance: 5 Minutes from Kioi Hall, 16 Minutes from Toshi Center



Tonkatsu Fumizen

Type: Tonkatsu Restaurant
Walking Distance: 2 Minutes from Kioi Hall, 13 Minutes from Toshi Center



Park Side Tables

Type: Italian Restaurant
Walking Distance: 6 Minutes from Kioi Hall, 5 Minutes from Toshi Center



AUX BACCHANALES

Type: French Restaurant
Walking Distance: 4 Minutes from Kioi Hall, 9 Minutes from Toshi Center



GARB CENTRAL

Type: Italian Restaurant
Walking Distance: 8 Minutes from Kioi Hall, 8 Minutes from Toshi Center



Soba Shiki

Type: Soba Noodle Restaurant
Walking Distance: 8 Minutes from Kioi Hall, 7 Minutes from Toshi Center



Starbucks

Type: Coffee Shop
Walking Distance: 10 Minutes from Kioi Hall, 5 Minutes from Toshi Center

Amenities



Radical Storage

Type: Luggage Storage Facility
Walking Distance: 10 Minutes from Kioi Hall, 7 Minutes from Toshi Center



Kinko's

Type: Printing Service
Walking Distance: 12 Minutes from Kioi Hall, 7 Minutes from Toshi Center

Lawson

Type: Convenience Store
Walking Distance: 7 Minutes from Kioi Hall, 9 Minutes from Toshi Center

7-Eleven

Type: Convenience Store
Walking Distance: 3 Minutes from Kioi Hall, 8 Minutes from Toshi Center



E-net ATM

Type: ATM
Walking Distance: 7 Minutes from Kioi Hall, 8 Minutes from Toshi Center



Tomod's

Type: Drug Store
Walking Distance: 7 Minutes from Kioi Hall, 9 Minutes from Toshi Center

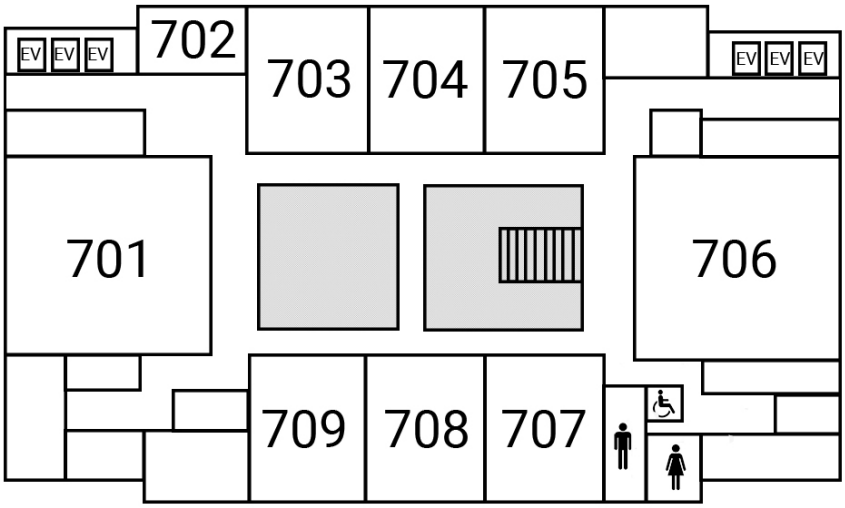
Scan the QR code to explore even more restaurant and amenities options, including Google Maps directions

Conference Venue: Tuesday, November 25 to Thursday, November 27

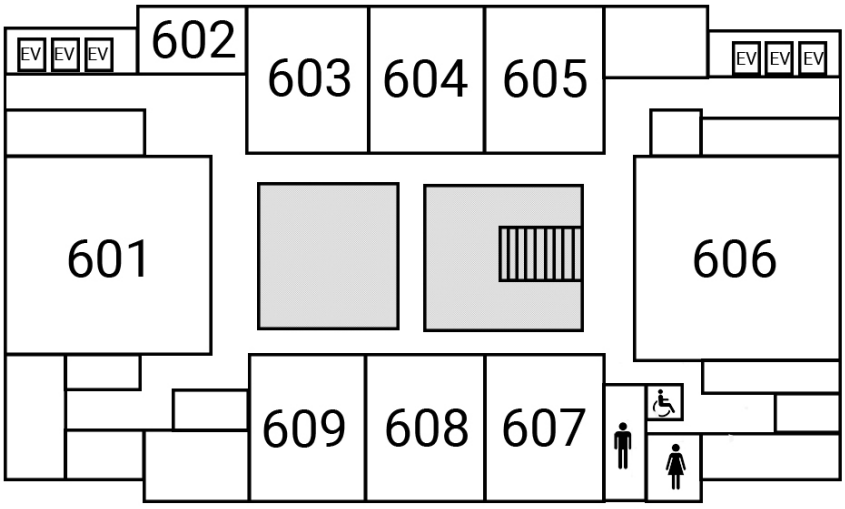
Toshi Center Hotel

Address: Hirakawacho 2-4-1, Chiyoda Ku, Tokyo

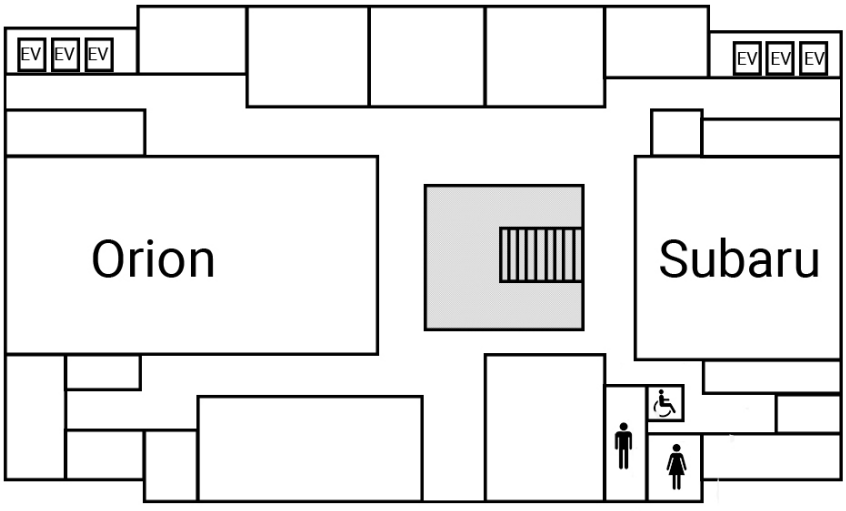
7F



6F



5F



Conference Venue: Tuesday, November 25 to Thursday, November 27

Toshi Center Hotel

Address: Hirakawacho 2-4-1, Chiyoda Ku, Tokyo

Please note that lunch is not provided. This map offers suggestions on where you can eat around the conference venue, as well as the locations of local amenities.



Restaurants & Cafes



Pizzeria D'Oro
Type: Italian Restaurant
Walking Distance: 4 Minutes from Toshi Center, 4 Minutes from Tokyo Garden Terrace Kioicho



Kōjimura
Type: Japanese Restaurant
Walking Distance: 4 Minutes from Toshi Center, 4 Minutes from Tokyo Garden Terrace Kioicho



Soranoiro
Type: Japanese Ramen
Walking Distance: 5 Minutes from Toshi Center, 6 Minutes from Tokyo Garden Terrace Kioicho



The Burger Shop Kioichō
Type: Hamburger Restaurant
Walking Distance: 2 Minutes from Toshi Center, 2 Minutes from Tokyo Garden Terrace Kioicho



Sushidokoro Hirakawa
Type: Sushi Restaurant
Walking Distance: 2 Minutes from Toshi Center, 2 Minutes from Tokyo Garden Terrace Kioicho



Tempura Tengen
Type: Tempura Restaurant
Walking Distance: 4 Minutes from Toshi Center, 5 Minutes from Tokyo Garden Terrace Kioicho



Erick South
Type: Indian Restaurant
Walking Distance: 5 Minutes from Toshi Center, 2 Minutes from Tokyo Garden Terrace Kioicho

Amenities



Radical Storage
Type: Luggage Storage Facility
Walking Distance: 7 Minutes from Toshi Center, 8 Minutes from Tokyo Garden Terrace Kioicho



Kinko's
Type: Printing Service
Walking Distance: 8 Minutes from Toshi Center, 8 Minutes from Tokyo Garden Terrace Kioicho



E-net ATM
Type: ATM
Walking Distance: 1 Minutes from Toshi Center, 1 Minutes from Tokyo Garden Terrace Kioicho



Seven Bank ATM
Type: ATM
Walking Distance: 6 Minutes from Toshi Center, 3 Minutes from Tokyo Garden Terrace Kioicho



Tomod's
Type: Drug Store
Walking Distance: 7 Minutes from Toshi Center, 1 Minutes from Tokyo Garden Terrace Kioicho



Seijo Ishii
Type: Supermarket
Walking Distance: 4 Minutes from Toshi Center, 1 Minutes from Tokyo Garden Terrace Kioicho

Scan the QR code to explore even more restaurant and amenities options, including Google Maps directions



November 23 | All times are Japan Standard Time (UTC+9)

Sunday at a Glance

18:00-20:00 Welcome Reception | The Public Red Akasaka
This event is included in the conference registration and is open to all registered delegates.

Join fellow delegates for a drink or two at the conference Welcome Reception. This event provides a great opportunity for delegates to network and get to know each other.

The Public Red Akasaka is a short ten-minute walk from Toshi Center Hotel.
Address: Akasaka 3-11–8, Minato Ku, Tokyo (The Centurion Hotel Classic Akasaka)



November 24 | All times are Japan Standard Time (UTC+9)

Monday at a Glance

Conference Venue: Tokyo Garden Terrace Kioicho Conference Center, Tokyo

09:30-10:30 Conference Check-in & Coffee | Foyer (4F)

10:30-11:00 **Welcome Addresses & Recognition of IAFOR Scholarship Winners | Main Room (4F) & Online**
Grant Black, Vice President, IAFOR and Chuo University, Japan

11:00-11:25 **Keynote Presentation | Main Room (4F) & Online**
Japan's Education Reform and Future of Global Education in the AI Era
Kan Suzuki, The University of Tokyo, Japan

11:25-11:40 Q&A

11:45-12:45 **Panel Presentation | Main Room (4F) & Online**
Internationalisation of Higher Education in East Asia: Challenges and Opportunities in Comparative Perspective
Futao Huang, Hiroshima University, Japan
Jing Liu, Tohoku University, Japan
Rodger Williamson, The University of Kitakyushu, Japan

12:45-12:55 Conference Photograph

12:55-14:15 Extended Break

14:15-14:40 **Keynote Presentation | Main Room (4F) & Online**
Educational Leadership in the Age of AI Agents
Eric Hawkinson, Kyoto University of Foreign Studies, Japan

14:40-14:55 Q&A

14:55-15:55 **Panel Presentation | Main Room (4F) & Online**
Panelists to be announced
Justin Sanders, Woven by Toyota, Japan (Moderator)



November 25 | All times are Japan Standard Time (UTC+9)

Tuesday at a Glance

Conference Venue: Toshi Center Hotel, Tokyo

09:00-09:15 **Conference Check-in | Foyer (5F)**

09:15-10:00 **Information Session | Orion Hall (5F)**
Matthew Chima, IAFOR, Japan
Melina Neophytou, IAFOR, Japan

10:05-11:05 **The Forum | Orion Hall (5F)**
Sean McMinn, The Hong Kong University of Science and Technology, Hong Kong (Respondent)
Melina Neophytou, IAFOR, Japan (Moderator)

11:05-11:35 Networking Coffee Break | Subaru Room (5F)

11:35-12:35 **Japanese Cultural Presentation | Orion Hall (5F)**
Shamisen Performance

12:35-14:00 **Extended Break**

14:00-15:00 **Afternoon Session 1**
Orion Hall (5F) | Conference Poster Session 1
Subaru Room (5F) | IAFOR Undergraduate Research Symposium (IURS) Poster Session 1

15:00-15:30 Networking Coffee Break | Subaru Room (5F)

15:30-16:30 **Afternoon Session 2**
Orion Hall (5F) | Conference Poster Session 2
Subaru Room (5F) | IAFOR Undergraduate Research Symposium (IURS) Poster Session 2

19:00-21:00 **Conference Dinner | Shunju Tameikesanno**
This is a ticketed event

Groundbreaking ideas

IAFOR Spring Conference Series in Tokyo

March 22-27, 2026 | Tokyo, Japan & Online

The 12th Asian Conference on Education & International Development (ACEID2026)
The 16th Asian Conference on Psychology & the Behavioral Sciences (ACP2026)
The 12th Asian Conference on Aging & Gerontology (AGen2026)

Abstract Submission Deadline:
December 12, 2025



Where will your ideas take you next?

Visit iafor.org/conferences for more information about our upcoming events

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November 26 | All times are Japan Standard Time (UTC+9)

Wednesday at a Glance

Conference Venue: Toshi Center Hotel, Tokyo

09:00-09:30 Conference Check-in & Coffee | Foyer (6F)

09:30-11:10 Onsite Parallel Session 1
Room 601 (6F): Challenging and Preserving: Culture, Inter/Multiculturalism and Language
Room 603 (6F): Innovative Technologies in Education
Room 604 (6F): Higher Education
Room 605 (6F): Educational Policy, Leadership, Management and Administration
Room 607 (6F): Education, Sustainability and Society
Room 608 (6F): Educational Policy, Curriculum Design and Development
Room 702 (7F): Education and Difference
Room 703 (7F): Professional Training, Development and Concerns in Education
Room 704 (7F): Assessment Theories and Methodologies
Room 705 (7F): Art and Design in Education
Room 707 (7F): AI in Education
Room 708 (7F): Foreign Languages Education and Applied Linguistics

11:10-11:25 Break

11:25-12:40 Onsite Parallel Session 2
Room 601 (6F): AI in Education (Workshop)
Room 603 (6F): Innovative Technologies in Education
Room 604 (6F): Higher Education
Room 605 (6F): Educational Policy, Differences in Higher Education
Room 607 (6F): Education, Sustainability and Society
Room 608 (6F): Educational Policy, Leadership, Management and Administration
Room 702 (7F): Education and Difference
Room 703 (7F): Professional Training, Development and Concerns in Education
Room 704 (7F): Teacher Education
Room 705 (7F): Curriculum Design and Development
Room 707 (7F): Architecture and Engineering Education
Room 708 (7F): Foreign Languages Education and Applied Linguistics

12:40-13:40 Extended Break



November 26 | All times are Japan Standard Time (UTC+9)

Wednesday at a Glance

13:40-15:20 Onsite Parallel Session 3
Room 601 (6F): Learning Experience, Student Learning and Learner Diversity (Workshops)
Room 603 (6F): Innovative Technologies in Education
Room 604 (6F): International Education
Room 605 (6F): Educational Policy, Leadership, Management and Administration
Room 607 (6F): Education, Sustainability and Society
Room 608 (6F): Educational Policy, Leadership, Management and Administration
Room 702 (7F): Mind, Brain and Psychology
Room 703 (7F): Professional Training, Development and Concerns in Education
Room 704 (7F): Adult, Lifelong and Distance Learning
Room 705 (7F): Curriculum Design, Counselling and Adjustments in Education
Room 707 (7F): AI in Education
Room 708 (7F): Foreign Languages Education and Applied Linguistics

15:20-15:35 Coffee Break

15:35-17:15 Onsite Parallel Session 4
Room 601 (6F): Teaching Experiences, Pedagogy, Practice and Praxis (Workshops)
Room 603 (6F): Innovative Technologies in Education
Room 604 (6F): Higher Education
Room 605 (6F): Educational Policy, Leadership, Management and Administration
Room 607 (6F): Education, Sustainability and Society
Room 608 (6F): Educational Policy, Leadership, Management and Administration
Room 702 (7F): Education and Difference
Room 703 (7F): Professional Training, Development and Concerns in Education
Room 704 (7F): Adult, Lifelong and Distance Learning
Room 705 (7F): Intercultural and Multicultural Education
Room 707 (7F): Education for STEAM
Room 708 (7F): Foreign Languages Education and Applied Linguistics

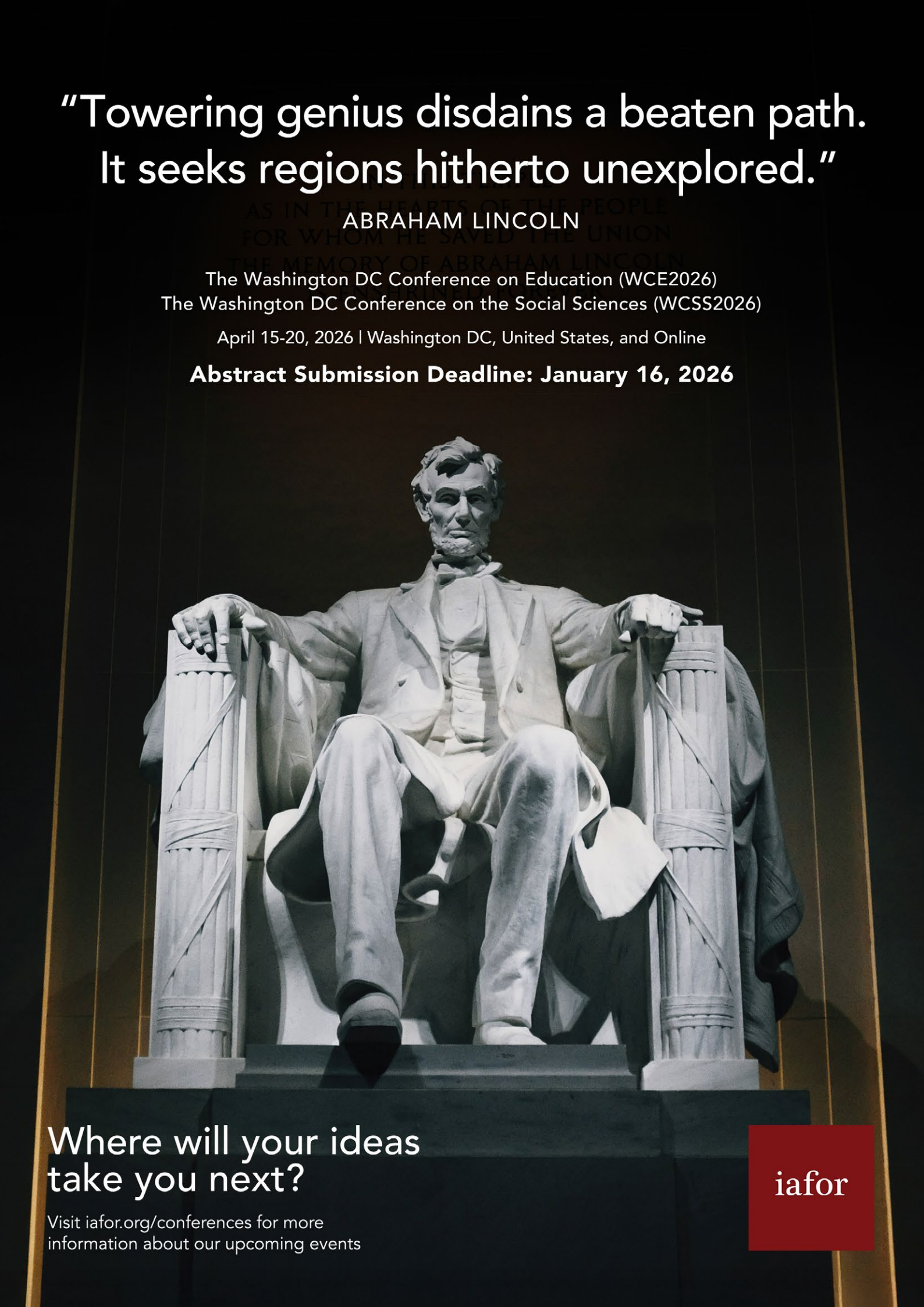
17:15-17:30 Break



November 26 | All times are Japan Standard Time (UTC+9)

Wednesday at a Glance

17:30-18:45 Onsite Parallel Session 5
Room 601 (6F): Educational Policy, Leadership, Management and Administration (Panel)
Room 603 (6F): Innovative Technologies in Education
Room 604 (6F): Higher Education
Room 605 (6F): Educational Policy, Leadership, Management and Administration
Room 607 (6F): Education, Sustainability and Society
Room 702 (7F): Innovative Technologies in Education
Room 703 (7F): Primary Education
Room 704 (7F): Teacher Education
Room 705 (7F): Curriculum Design and Development
Room 707 (7F): Career Education


"Towering genius disdains a beaten path.
It seeks regions hitherto unexplored."
ABRAHAM LINCOLN
The Washington DC Conference on Education (WCE2026)
The Washington DC Conference on the Social Sciences (WCSS2026)
April 15-20, 2026 | Washington DC, United States, and Online
Abstract Submission Deadline: January 16, 2026
Where will your ideas take you next?
Visit iafor.org/conferences for more information about our upcoming events
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November 27 | All times are Japan Standard Time (UTC+9)

Thursday at a Glance

Conference Venue: Toshi Center Hotel, Tokyo

08:30-09:00 Conference Check-in & Coffee | Foyer (6F)

09:00-10:40 Onsite Parallel Session 1
Room 601 (6F): International Education
Room 603 (6F): Higher Education
Room 604 (6F): Early Childhood Care and Education
Room 605 (6F): Language Learning and Multilingual Education
Room 607 (6F): Design and Implementation of Educational Policy
Room 608 (6F): Education Research and Development in Higher Education
Room 702 (7F): Adolescent and Adult Education
Room 703 (7F): Learning Experiences, Student Learning and Learner Diversity
Room 704 (7F): Technical-Vocational and Entrepreneurship Education
Room 705 (7F): Foreign Language Education and Applied Linguistics
Room 707 (7F): Innovative Technologies in Education
Room 708 (7F): Education, Sustainability and Society

10:40-10:55 Break

10:55-12:10 Onsite Parallel Session 2
Room 601 (6F): Writing a Successful Grant Application: Mastering Significance, Innovation, and Approach for Your Career (Workshop)
Room 603 (6F): Higher Education
Room 604 (6F): Professional Training, Development and Concerns in Education
Room 605 (6F): Service Learning
Room 607 (6F): Educational Policy, Leadership, Management and Administration
Room 608 (6F): Higher Education
Room 703 (7F): Adult and Special Education
Room 704 (7F): Knowledge Creation, Preservation and Access
Room 705 (7F): Gender Issues in Education
Room 707 (7F): Innovative Technologies in Education
Room 708 (7F): Educational Policy, Leadership, Management and Administration



November 27 | All times are Japan Standard Time (UTC+9)

Thursday at a Glance

12:10-13:10 Extended Break

13:10-14:50 Onsite Parallel Session 3
Room 601 (6F): Assessment Theories and Methodologies
Room 603 (6F): Higher Education
Room 604 (6F): Social Studies and Citizenship Education
Room 605 (6F): Language Learning and Multilingual Education
Room 607 (6F): Innovative Technologies in Education
Room 608 (6F): Education Research and Development in Higher Education
Room 703 (7F): Learning Experiences, Student Learning and Learner Diversity
Room 704 (7F): Education for STEAM
Room 705 (7F): Foreign Language Education and Applied Linguistics
Room 707 (7F): Innovative Technologies in Education
Room 708 (7F): Special Topics in Education

14:50-15:05 Coffee Break

15:05-16:45 Onsite Parallel Session 4
Room 601 (6F): Higher Education
Room 603 (6F): Higher Education
Room 604 (6F): Professional Training, Development and Concerns in Education
Room 605 (6F): Language Learning and Multilingual Education
Room 607 (6F): AI in Education
Room 608 (6F): Higher Education
Room 703 (7F): Learning Experiences, Student Learning and Learner Diversity
Room 704 (7F): Education for STEAM
Room 705 (7F): Art and Design in Education
Room 707 (7F): Innovative Technologies in Education
Room 708 (7F): Educational Policy, Leadership, Management and Administration

16:50-17:00 Onsite Closing Session | Room 601 (6F)



November 28 | All times are Japan Standard Time (UTC+9)

Friday at a Glance

Conference Venue: Online via Zoom

09:55-10:00 Message from IAFOR

10:00-11:00 **The Forum**
Eric Hawkinson, Kyoto University of Foreign Studies, Japan
Apipol Sae-Tung, IAFOR, Japan (Moderator)

11:05-12:05 **Panel Discussion**
Human-AI Partnership in Teacher Education: Rethinking the Hybrid Teacher of the Future
Nabila Nindya Alifia Putri, Universitas Islam Internasional Indonesia, Indonesia
Danny Liu, University of Sydney, Australia
Jason Lodge, University of Queensland, Australia
Susie Kung, Manukau Institute of Technology, New Zealand (Moderator)

12:15-13:55 **Online Parallel Session 1**
Live-Stream Room 1: Higher Education
Live-Stream Room 2: Learning Experiences, Student Learning and Learner Diversity
Live-Stream Room 3: Foreign Languages Education and Applied Linguistics
Live-Stream Room 4: AI in Education
Live-Stream Room 5: Innovative Technologies in Education
Live-Stream Room 6: Intercultural and International Education
Live-Stream Room 7: Professional Training, Development and Concerns in Education

13:55-14:05 Break



November 28 | All times are Japan Standard Time (UTC+9)

Friday at a Glance

Conference Venue: Online via Zoom

14:05-15:45 Online Parallel Session 2
Live-Stream Room 1: Higher Education
Live-Stream Room 2: Curriculum Development and Educational Leadership
Live-Stream Room 3: Foreign Languages Education and Applied Linguistics
Live-Stream Room 4: AI in Education
Live-Stream Room 5: Innovative Technologies in Education
Live-Stream Room 6: Intercultural and International Education
Live-Stream Room 7: Professional Training, Development and Concerns in Education

15:45-15:55 Break

15:55-17:35 Online Parallel Session 3
Live-Stream Room 1: Higher Education
Live-Stream Room 2: Special Topics: Alternative Education and TVET
Live-Stream Room 3: Foreign Languages Education and Applied Linguistics
Live-Stream Room 4: AI and Emerging Learning Modalities
Live-Stream Room 5: AI and Digital Literacy
Live-Stream Room 6: Education, Sustainability and Society
Live-Stream Room 7: Teacher Education

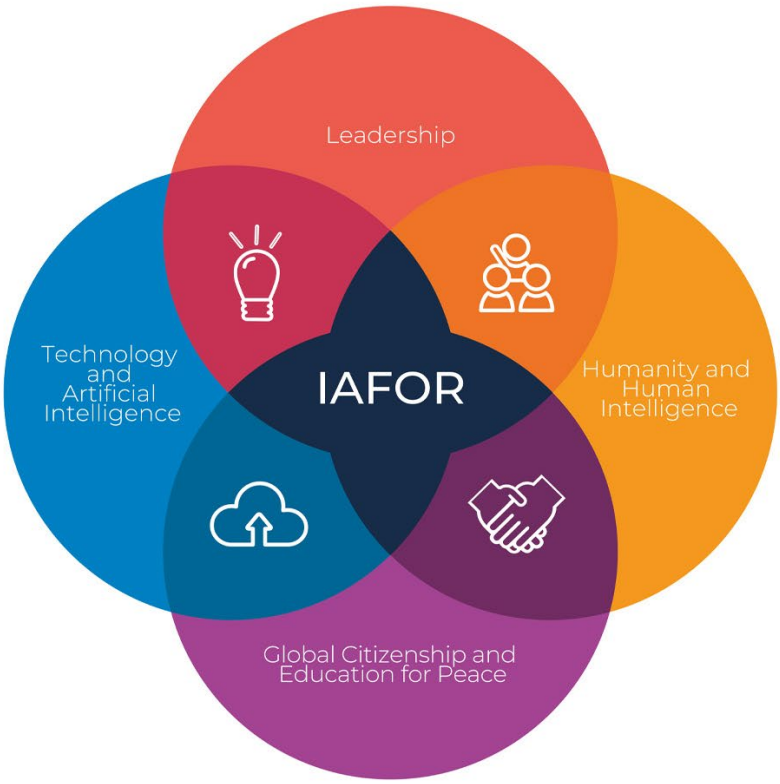
17:35-17:45 Break

17:45-18:45 Panel Discussion
Teaching Leadership Through Artificial Intelligence
Najwa Saba 'Ayon Fares, Rafik Hariri University, Lebanon
Mikel Garant, University of Helsinki, Finland
Martin Parsons, Hannan University, Japan
Murielle El Hajj Nahas, Lusail University, Qatar (Moderator)

18:45-18:55 Closing Message from IAFOR

IAFOR's Conference Themes for 2025-2029

International | Intercultural | Interdisciplinary



IAFOR's conference programme provides an essential comparative and contrastive space for people to engage in multidisciplinary research across borders of nation, culture, discipline, and professions. We encourage mixed approaches and methodologies, combining theory and practice between and across the disciplines, and we look to harness the collective intelligence of our International Academic Forum in addressing some of the most pressing issues of our time. Through the implementation of new formats in our conference programme over the last year, including Intelligence Briefings, Keynote Interviews, and The Forum, we gathered insights into what has been discussed at the theoretical and policy levels, identify the challenges, and the outlook for best practices in tackling global contemporary issues, which we have identified as the themes for 2025-2029. Our four themes can be seen as standalone themes, but they are also very much in conversation with each other. Themes may be seen as corollaries, complementary, or in opposition/juxtaposition with each other. The themes can be considered as widely as possible and are designed, in keeping with our mission, to encourage ideas across the disciplines.

1. Technology and Artificial Intelligence
Our first theme examines the rapid pace of technological advancements, aided most particularly by those driven by artificial intelligence and its enormous and growing impact in all fields.

2. Humanity and Human Intelligence
Our second theme asks us which principles, values, and attributes we wish to encourage, protect, and nurture and how we accomplish this. Technological advancements constantly ask us to reconsider and reimagine what it means to be human, including questions regarding communication, creativity, inclusivity, ethics, and care.

3. Global Citizenship and Education for Peace
This theme prompts us to consider our existence and coexistence with each other, within our communities and places of belonging, and with peoples of different countries, cultures, and backgrounds, as well as with our environment and our planet. It includes engagement with enormous issues facing us beyond borders, such as peace and human security, climate change, etc.

4. Leadership
The final theme recognises the continuing importance of leadership as a skill, particularly in light of difficult times, where recognising and encouraging best practices in leadership at all levels of society is critical. Encouraging leadership at the government level, in businesses, and within institutions of all sizes represents the engine of change.

Conference Themes in Theory, Policy, and Practice

Many theories are born and initially tested in the academy, informing discussions in the public sphere that influence policy. IAFOR represents a unique combination of engagement emerging from the collaborative efforts of senior policymakers, administrators, and individuals working on the ground or in the field. IAFOR has made this rare combination of equitable theoretical and practical exchanges the standard for our organisation and represents a valuable model for how science should be done.

We will develop conference and institutional programmes and publications around these themes as well as capacity building sessions for our conference programme over the next five years. It is our aim with the implementation of these themes, alongside the implementation and continuing refinement of new formats, to best harness the unique arena IAFOR and its network have built in regards to pressing issues of today and the future.

General Information

This QR code, also located shown on the back of your name badge, contains the information you need to attend the conference, including:

- Full Conference Schedule
- The '**Find a Presentation**' Feature
- Conference Survey
- Suggested Lunch Options
- Online and Virtual Presentations
- Presentation and Session Chair Guidelines, and more.



Check-in & Information Desk

You will be able to pick up your name badge at the Conference Check-in & Information Desk at the times listed below. If you have any questions or concerns, IAFOR staff and volunteers will happily assist you in any way they can.

Monday, November 24 | 09:30-15:00 – Tokyo Garden Terrace Kioicho Conference Center, Foyer (4F)
Tuesday, November 25 | 09:00-16:00 – Toshi Center Hotel, Foyer (5F)
Wednesday, November 26 | 09:00-18:00 – Toshi Center Hotel, Foyer (6F)
Thursday, November 27 | 08:30-16:00 – Toshi Center Hotel, Foyer (6F)
Friday, November 28 | No in-person check-in

Name Badges

Wearing your badge is required for entrance to the sessions. You must wear your badge at all times.

Refreshment Breaks

Complimentary coffee, tea, water, and light snacks will be available during the scheduled coffee breaks. Please note that lunch is not provided.

Connecting to WiFi

Free WiFi is provided at the conference venues for light use, like reading emails and web browsing. Streaming video will not be possible. If your presentation includes video, please bring it on a file that can be played without an internet connection.

Tokyo Garden Terrace Kioicho Conference Center
Network Name: TGTC-WiFi
Password: kioic-0701

Toshi Center Hotel
Network Name: Toshicenter_Hotel_Wi-Fi
Password: toshi19590302

General Information

Conference Schedule

The full conference schedule (including abstracts) and conference programme are available on the conference website, accessible through the QR code located on the previous page as well as the back of your nametag.

Pre-recorded Virtual Presentations & Virtual Poster Presentations

A full list of pre-recorded virtual video presentations and virtual poster presentations will be on the conference website during and after the conference. We encourage you to scan the QR code to watch these presentations and provide feedback through the video comments.

Conference Catch-up

All Keynote Presentations and live-streamed sessions will be recorded and uploaded to the Conference Catch-up page (video-on-demand) via Vimeo. The catch-up page will be publicly available after the conference until **Sunday, December 28, 2025.**

Certification

Corresponding authors will be able to download Certificates of Presentation for all presenters by logging in to the submission page. Certificates of Presentation will be available from **Monday, December 8, 2025**.

Session Chair certification, Certificates of Participation for non-presenters, as well as reviewer certification for Review Committee members and Senior Reviewers, will be sent out by email in a PDF format within two weeks of the Conference's conclusion.

Photo/Recording Waiver

Human interaction through networking, and dissemination of this knowledge, is at the core of what IAFOR does as an academic research organisation, conference organiser and publisher. As part of the archiving of the conference event, IAFOR takes photos in and around the conference venue, and uses the photos to document the event. This also includes the filming of certain sessions. We consider this documentation important and it provides evidence of our activities to members, partners and stakeholders all over the world, as well as to current and potential attendees like you. Some of these photos will therefore appear online and in print, including on social media. The above are the legitimate interests of the organisation that we assert under the European Union law on General Data Protection Regulation (GDPR). Under this legislation, you have an absolute right to opt out of any photo. We are committed to protecting and respecting your privacy.
Read our full privacy policy – **iafor.org/about/privacy-policy**

Networking: Connecting with Other Delegates

IAFOR conferences are designed to offer countless networking opportunities to make and consolidate personal and professional connections, reconnect with colleagues, and meet new friends in a spirit of convivial collegiality. Whether in the plenaries, parallel sessions, workshops, information sessions, or cultural events, we encourage your active and open participation throughout the conference, remembering the importance of the spaces in-between; over a cup of coffee or a glass of wine, or the continuation of conversations and relationships outside the conference. We encourage you to network at the conference over the **Networking Events**, the **Networking Coffee Breaks**, and the **Extended Breaks**.

In addition, you are invited to join the **Online Presentation Sessions** and the **Online Forum** discussion to explore even more presentations and opportunities to make connections for future collaborations. While conferences serve as a platform to present your work and make connections, please be mindful of the other delegates' privacy and their consent to provide personal information.

Networking Spaces

The conference venues feature several comfortable spaces, such as the main lobby, coffee area, and the restaurant, which serve as perfect locations for networking during the conference. These spaces provide an excellent opportunity to meet new people, connect with familiar faces, exchange ideas, and explore possible collaborations. We encourage you to make use of these spaces to connect with fellow attendees for a quick coffee or a longer chat to broaden your network and enhance your conference experience.

Missed the opportunity to make connections?

You can connect with other delegates by using our '**Find a Presentation**' feature. This feature can be accessed by scanning the QR code provided on the back of your name badge, and is also available on the conference website. You can search by presentation title, submission number, the presenter's name, or the name of their affiliation. From there, you can look up the presenter's bio and connect with them through their preferred contact channel.

In addition to the '**Find a Presentation**' online feature, presentation schedules are also displayed in front of presentation rooms. Use the notes pages to write down the presentations that you plan to attend or any information you may need for the conference.

Networking Events

Welcome Reception

Join fellow delegates for a drink or two at the conference Welcome Reception. This event provides a great opportunity for delegates to network and get to know each other.

Time & Date: Sunday, November 23, 2025 | 18:00-20:00
Location: **The Public Red Akasaka**
Address: Akasaka 3-11-8, Minato Ku, Tokyo
Ticket Price: **Free to attend**
Admission is included in the conference registration and is only open to registered conference delegates and audience members

Cultural Presentation | The Sound & Spirit of the Japanese Shamisen

Join us for a special Cultural Presentation celebrating one of Japan's most distinctive traditional instruments: the shamisen. Renowned performer and teacher Kuniaki Matsunaga (KUNIAKI) based in Yokkaichi, Mie prefecture, brings the shamisen's rich history and vibrant sound to life, giving delegates a rare opportunity to experience this unique Japanese musical heritage.

Time & Date: Tuesday, November 25, 2025 | 11:35-12:35
Location: **Toshi Center Hotel, Orion Hall (5F)**
Ticket Price: **Free to attend**
Admission is included in the conference registration fee and is only open to registered onsite conference delegates.

About the Shamisen
The shamisen, a three-stringed lute played with a bachi, or large plectrum, has been at the heart of Japanese music for over four centuries. Its clear, percussive tone and dynamic range have made it a central instrument in many of Japan's cultural traditions, including kabuki theatre, bunraku puppet plays, folk songs, and regional festival music. Originating in the 16th century, the shamisen evolved from the Chinese sanxian, yet developed a distinctly Japanese identity, both in its construction and in the expressive, highly physical style of performance it inspires. More than an instrument, the shamisen embodies a living tradition. While the instrument carries centuries of tradition, modern musicians continue to innovate with the shamisen, blending it with jazz, rock, and world music, while maintaining deep respect for its roots.

Conference Dinner

Celebrated for its blend of traditional and contemporary Japanese cuisine, **Shunju Tameike Sanno** offers an experience where classic flavours meet modern culinary techniques. Join us for an evening of refined dining in Tokyo's cosmopolitan midtown.

Time & Date: Tuesday, November 25, 2025 | 19:00-21:00
Location: Shunju Tameike Sanno, Sanno Park Tower 27F, Nagatacho 2-1-1, Chiyoda Ku, Tokyo
Ticket Price: **Sold Out**
This is an optional ticketed event. Only onsite conference delegates with pre-purchased tickets are able to attend the Conference Dinner.

Notes



IAFOR events are among the most diverse on Earth

Bridging divides of nation, culture, and discipline; informing and shaping ideas, research, practice, and policy in a comparative and contrastive space, IAFOR encourages the sharing and nurturing of diverse ideas.

Over the past year, more than 5,000 delegates from more than 120 countries have participated in an IAFOR event.

5,000+
Delegates

120+
Countries

Inspiring global collaborations, this diversity of peoples, nations, voices, cultures, and ideas is at the heart of what we do.

It is our greatest strength. Join us.

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iafor.org/publications

IAFOR Publications

Conference Proceedings

IAFOR Conference Proceedings are Open Access research repositories that act as permanent records of the research generated by IAFOR conferences. The Conference Proceedings are published online in the IAFOR Research Archive (papers.iafor.org). All accepted authors who present at the conference may have their full paper published in the online Conference Proceedings. For further details of how to submit your paper, please visit the Conference website.

Please note that:

1) Papers published in the Conference Proceedings cannot be considered for publication in IAFOR journals.
2) IAFOR's Conference Proceedings are not peer-reviewed and are not "Scopus-indexed".

Full text submission is due by **Wednesday, January 14, 2026**, through the online system.
The proceedings will be published on **Friday, February 20, 2026**.

Conference Reports and Intelligence Briefings (ISSN: 2759-4939)

IAFOR produces conference reports that provide concise and coherent overviews of the ideas, conversations, and areas of research presented at our conferences. These include key themes and takeaways, referencing programme(s), speakers and attendees, which are curated and archived for both those who attended the event, as well as those who did not. Readers can stay abreast of many of the developments and insights provided by the conference, and the collective intelligence of its participants. Links to video recordings of the presentations and interviews references are included where possible, encouraging readers to engage further with the conference material and presentations. Each report contains photos of the event, as well as key statistics pertaining to general attendance and demographics.

Read and download the Conference Reports and Intelligence Briefings, and access Conference Photo Galleries from the past conferences from the QR code on the back of your name badge. You will receive a notification email when the Conference Photos and the Conference Report and Intelligence Briefing of this conference are available.

THINK Magazine: The Academic Platform

THINK is an online magazine presenting the latest in interdisciplinary research and ideas from some of the world's foremost academics and thought leaders. As a publishing platform, THINK makes selected research presented at IAFOR's international, intercultural, interdisciplinary conferences freely available to a global academic audience. Content on THINK spans everything from the arts to psychology, politics to film, law to education and history to technology, presenting research, ideas and perspectives from every corner of the globe. The format is varied, encompassing full research papers, long-form journalism, opinion pieces, creative writing, interviews, podcasts, video, photography and more. To learn more about THINK, please visit think.iafor.org or access the webpage from the QR code on the back of your name badge.

iafor.org/publications

IAFOR Journals

IAFOR's Open Access Journals

IAFOR publishes several editorially independent, Open Access journals across a variety of disciplines. They conform to the highest academic standards of international peer review, and are published in accordance with IAFOR's commitment to make all of our published materials available online.

How are papers submitted?

Submissions should be original, previously unpublished papers which are not under consideration for publication in any other journal. All articles are submitted through the submission portal on the journal website and must conform to the journal submission guidelines.

How does IAFOR ensure academic integrity?

Once appointed by IAFOR's Publications Committee, the Journal Editor is free to appoint his or her own editorial team and advisory members, who help to rework and revise papers as appropriate, according to internationally accepted standards. All papers published in the journal have been subjected to the rigorous and accepted processes of academic peer review. Neither editors nor members of the editorial team are remunerated for their work.

Where are the journals indexed?

IAFOR Journals are indexed in Scopus, Web of Science, DOAJ, ERIC, MIAR, TROVE, CiteFactor and EBSCO, SHERPA/ROMEO and Google Scholar. DOIs are assigned to each published issue and article via Crossref. Please note that indexing varies from journal to journal.

What's the reach?

Each of our journal issues is viewed thousands of times a month and the articles are frequently cited by researchers worldwide, largely due to our dedicated marketing efforts. Each issue is promoted across our social media platforms and to our tailored email marketing lists. On average, each journal publishes biannually.

What's the cost?

IAFOR Journals are Open Access publications, available online completely free of charge and without delay or embargo. Authors are not required to pay charges of any sort towards the publication of IAFOR Journals and neither editors nor members of the editorial boards are remunerated for their work.

How are IAFOR Journals related to IAFOR Conferences and Conference Proceedings?

IAFOR Journals reflect the interdisciplinary and international nature of our conferences and are organised thematically. A presenter can choose to publish either in Conference Proceedings or submit their manuscript to the corresponding IAFOR Journal for review.

Current IAFOR Journal titles include

IAFOR Journal of Cultural Studies (Scopus Indexed)
IAFOR Journal of Education (Scopus & Web of Science Indexed)
IAFOR Journal of Literature & Librarianship (Scopus Indexed)

If you would like more information about any of IAFOR's publications, please visit iafor.org/publications

Academic Grant & Scholarship Recipients

IAFOR's grants and scholarships programme provides financial support to PhD students and early career academics, with the aim of helping them pursue research excellence and achieve their academic goals through interdisciplinary study and interaction. Our warmest congratulations go to the following scholarship recipients who have been selected to receive grants and scholarships to present their research at the conference.

ACE2025 Scholarship Recipients

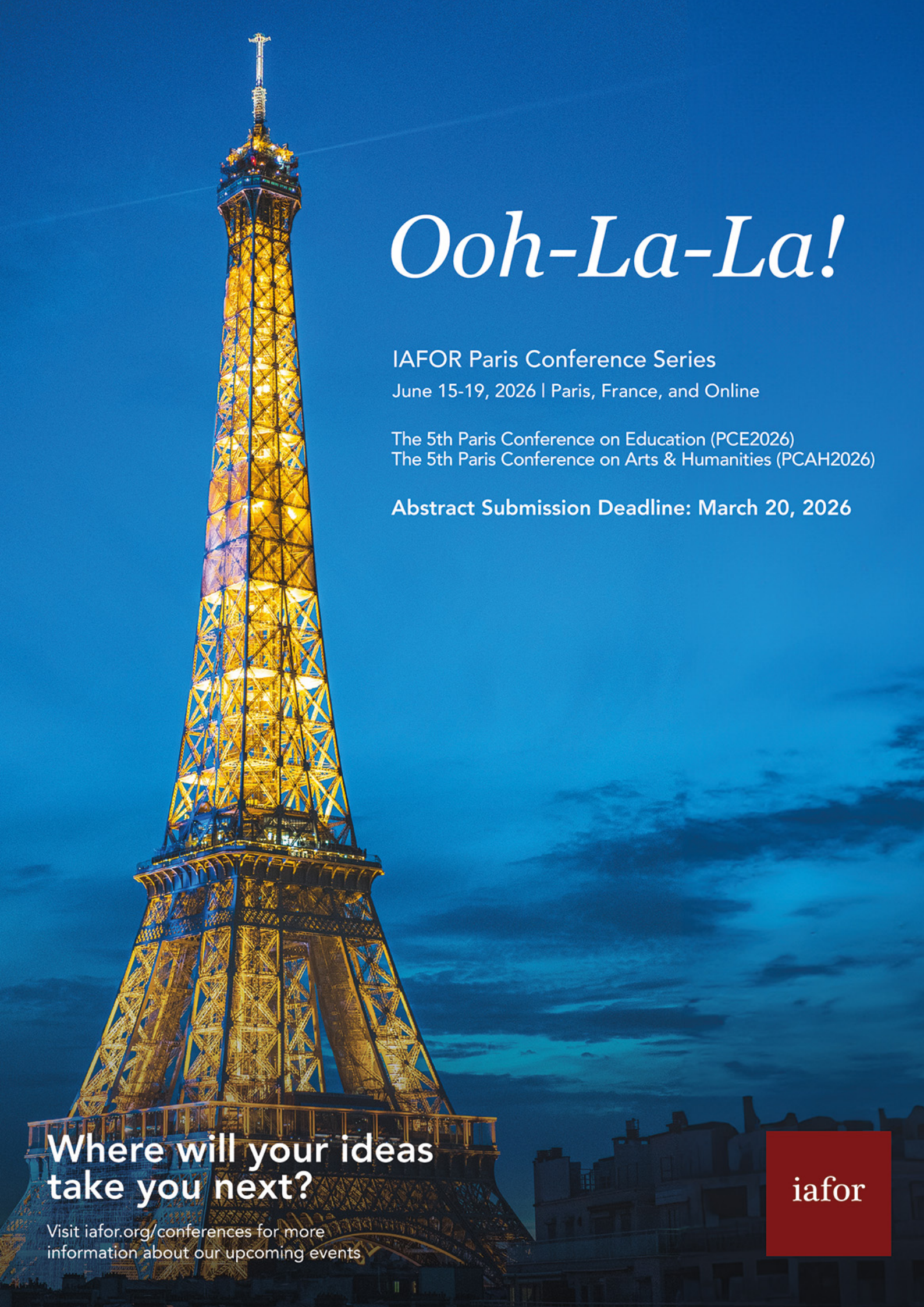
Deal Demetillo (Oral Presentation)
96137 | *Becoming a Global Citizen: Lived Experiences and Perceptions of Student Leaders in a Philippine Higher Education Institution*
Mr Deal Demetillo is a full-time faculty member at Cebu Institute of Technology – University in the Philippines, where he teaches English language and literature courses.

Kris Oshin Lagare (Oral Presentation)
96082 | *Exploring Teachers' Views on Artificial Intelligence (AI) Integration: Basis for Policymaking*
Ms Kris Oshin Lagare, is currently the English Department Head of Malaybalay City National Science High School, Aglayan, Malaybalay, Bukidnon, Philippines.

Jinal Purohit (Live-Stream Presentation)
97483 | *Students as Co-Creators: The Impact of Student Autonomy on Engagement and Motivation in an English Language Classroom*
Ms Jinal Purohit is a Teaching Assistant and research scholar at Indian Institute of Information Technology Vadodara, India. Her interests include second language pedagogy, affective factors, and AI in ELT. She is currently researching student autonomy and its impact on engagement and motivation.

Christian Santiago (Oral Presentation)
93211 | *Determinants of Quality of Life Science Research Among Senior High School STEM Students in the Philippines: A Mixed-Methods Study*
Dr Christian Santiago is currently an Instructor at Aurora State College of Technology in Aurora, Philippines. He teaches science students using innovative approaches while mentoring them in scientific inquiry through experimentation.

Amin Zaini (Live-Stream Presentation)
97358 | *Critical Engagement with Mis/disinformation Through Ambivalent Reading: A Critical Literacy Approach to Intercultural Education*
Dr Amin Zaini is currently a lecturer in Language and Literacies Education (LALE Team) at The University of Melbourne, Australia.


Ooh-La-La!
IAFOR Paris Conference Series
June 15-19, 2026 | Paris, France, and Online
The 5th Paris Conference on Education (PCE2026)
The 5th Paris Conference on Arts & Humanities (PCAH2026)
Abstract Submission Deadline: March 20, 2026
Where will your ideas take you next?
Visit iafor.org/conferences for more information about our upcoming events
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Introducing the IAFOR Research Centre at The University of Osaka, Japan

The IAFOR Research Centre (IRC) is a politically independent international interdisciplinary think tank based at the Osaka School of International Public Policy (OSIPP), at The University of Osaka in Japan, that conducts and facilitates international and interdisciplinary research projects. The main focus is to encourage mutual international and intercultural understanding and cooperation in line with IAFOR's mission of encouraging interdisciplinary discussion, facilitating heightened intercultural awareness, promoting international exchange, and generating and sharing new knowledge.

The IRC helps to nurture and capacity build by encouraging students to take part in international conferences and research projects, in line with The University of Osaka's Global 30 commitments from Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT).

For more information about the IAFOR Research Centre visit:
www.osipp.osaka-u.ac.jp/iaforresearchcentre/

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OSIPP-IAFOR RESEARCH CENTRE
THE UNIVERSITY OF OSAKA

THE IAFOR RESEARCH CENTRE
OSAKA SCHOOL OF INTERNATIONAL PUBLIC POLICY
THE UNIVERSITY OF OSAKA

大阪大学大学院国際公共政策研究科OSIPP
IAFOR研究センター





Tuesday, November 25

Poster Sessions

All times are Japan Standard Time (UTC+9)

Abstracts appear as originally submitted by the author. Any spelling, grammatical, or typographical errors are those of the author.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

Adult, Lifelong & Distance Learning

96862 | *Enhancing Student Support in Open and Distance E-Learning: An Evaluation of Student Support Services at UP Open University*
Jelaine Bagos, University of the Philippines Open University, Philippines

Student support services play a vital role in Open and Distance e-Learning (ODeL) helping students navigate the academic, administrative, and technical challenges of flexible and often asynchronous learning environments. Effective support mechanisms contribute significantly to student engagement, retention, and overall learning experiences (Chen et al., 2021; Green et al., 2020). At the Faculty of Management and Development Studies (FMDS) of the University of the Philippines Open University (UPOU), various student support initiatives have been implemented including the FMDS Student Support Site, Welcome Infographic for New Students, Student Self-Advising Checklist, UPOU and Program Helpdesks, Facebook Group Chat for New Students, FMDS and Program Student Orientations, and the FMDS Student Support Staff who respond to inquiries through the Student Support email and Helpdesk. This study evaluated the effectiveness of these services for students enrolled in the Second Semester/Trimester of AY 2024-2025. Specifically, it aimed to: (1) identify which student support services were availed, (2) assess their effectiveness in addressing students' academic and administrative concerns, (3) determine areas for improvement, and (4) identify additional support services students would like to see implemented. An online survey was conducted to collect data on students' experiences and perceptions of these services. Data were analyzed using descriptive statistics such as frequency counts, percentages, and measures of central tendency. The study also presented recommendations to enhance student support services making them more inclusive, efficient, and responsive to the needs of students in an ODeL setting.

100534 | *Tradition Meets Tech: An AI-Enhanced Karuta Project for Intergenerational Stereotype Reduction*
Kaoru Mita, Jissen Women's University, Japan
Maiko Oikawa, Yamano College of Aesthetics, Japan
Mika Shirao, Jissen Women's University, Japan

This study analyzes an innovative intergenerational project in Tokyo, where university students and older adults collaborated on a karuta (a traditional Japanese card game) tournament. The project uniquely integrated generative AI, both as a creative tool for students to design cards and as a text-to-speech (TTS) announcer during the event. Through pre- and post-event surveys with both student (N=23 pre, N=26 post) and older adult (N=5) participants, we evaluated the project's impact on attitudes and the effectiveness of its technological integration. The findings reveal a significant reduction in students' negative stereotypes towards the elderly, particularly regarding perceived rigidity and inability to learn new things. Communication anxiety also decreased. These positive shifts, consistent with Allport's Contact Theory, were primarily attributed to direct, personal interactions that replaced abstract stereotypes with individualized understanding. Conversely, the application of AI proved to be a double-edged sword. While students successfully used AI as a creative partner, the AI-powered TTS announcer was largely unintelligible to the older participants, highlighting a critical failure in user-centered design. Feedback from older adults confirmed high event satisfaction but also expressed a desire for greater reciprocity, wishing to be active contributors rather than passive participants. This case study demonstrates a successful model for reducing age-based prejudice but underscores the limitations of AI in socially sensitive roles. We propose a "human-in-the-loop" approach, leveraging AI for creative support while preserving essential human-led communication, as a critical framework for future technology-enhanced intergenerational programs.

101259 | *Defining Contemporary Adult Professional Development: Insights from Service Users, Providers, and Experts in Latvia*
Gunta Siliņa Jasjukevica, University of Latvia, Latvia
Svetlana Surikova, University of Latvia, Latvia
Sanita Baranova, University of Latvia, Latvia
Inese Lūsēna-Ezera, Riga Technical University Liepaja Academy, Latvia

This study aims to evaluate the current adult education system in Latvia and to explore how adults understand contemporary professional development. It focuses on how different stakeholder groups—service users, providers, and experts—perceive modern approaches to adult learning in the context of lifelong education and labor market relevance. The study employed a qualitative research design, including 14 focus groups with 129 participants. Service users (n=68) represented eight sectors with high employment levels in the country. Service providers (n=33) included representatives from 12 institutions—universities, vocational schools, and training centers. The expert group (n=28) comprised 12 representatives from three ministries and their subordinate institutions, as well as equal representation (n=8 each) from social partners and sectoral expert councils. Discussions focused on learning formats, approaches and methods to professional development, guiding principles, opportunities for growth, and achievement of outcomes. Qualitative data analysis was performed using NVivo software, enabling structured coding and interpretation. To ensure reliability, each focus group transcript was coded by at least two researchers. Findings reveal a shared understanding that contemporary adult professional development should be flexible, goal-oriented, and collaborative. However, each group emphasized different aspects. Service users stressed practical outcomes and labor market-relevant skills. Providers focused on technology-enhanced and personalized learning environments. Experts highlighted the need for systematic cross-sector collaboration and strategic alignment with educational and economic policies. The study highlights the complexity of adult professional development and underscores the need to integrate diverse perspectives to create responsive and effective learning opportunities.

101333 | *Barriers to Adult Professional Competence Development in Latvia: Insights from Service Users, Providers, and Experts*
Inese Lusena-Ezera, Riga Technical University, Latvia
Gunta Silina-Jasjukevica, University of Latvia, Latvia

The study explores barriers to adult professional competence development identified by service users, providers, and experts in adult professional development processes in Latvia. In November and December 2024, 14 focus group interviews and discussions were conducted, involving 129 participants from three target groups: adult professional development service providers (n=33), service users (n=68) and experts (n=28). Findings indicate that contextual learning barriers are the main factor hindering adult professional competence development, particularly emphasized by service users, who believe that the work environment influences professional development (67.5%), especially in public administration (27.5%). Furthermore, at the contextual level, particular emphasis has been placed on challenges such as fragmented policy implementation, limited resource availability within municipalities and state institutions, and the uneven accessibility of technological infrastructure. The lack of transfer of knowledge and skills to the real working environment has also been identified as a major problem: training often lacks relevance to organizational needs, is implemented formally and participants lack confidence in the practical value of the results obtained. Personal learning barriers, such as low motivation and initiative, also hinder professional development, alongside misalignment between training offers, labor market demands, and individual needs. The study concludes that an integrated approach, addressing both individual and systemic factors, is essential for fostering adult professional competence in Latvia. The study was part of the project "Elaboration of evidence-based solutions for effective professional competence development of adults and assessment of the transfer of its results into practice in Latvia" within the State research program "Education".

Assessment Theories & Methodologies

100904 | *Automatic Item Generation and Item Difficulty Prediction Based on Generative Artificial Intelligence and Bloom's Taxonomy of Cognitive Domain*
Po-Hsi Chen, National Taiwan Normal University, Taiwan
Chia-En Hsieh, National Taiwan Normal University, Taiwan

Automatic item generation (AIG) had been suggested for more than ten years (Gierl, Zhou, & Alves, 2008), whereas the artificial intelligence was applied on AIG since the recent five years. In this research, the authors try to combine generative artificial intelligence (AI), Bloom's Taxonomy of cognitive domain and psychometric methods to create an automatic item generation system in order to generate test items efficiently. Large language model (LLM) and generative AI prompts based on the Bloom's taxonomy had been created for developing the automatic item generation algorism. Based on LLM and generative AI, the AIG algorism can help to create different types of items for assessing different levels of cognitive domain in Bloom's taxonomy. For example, the items for assessing exemplifying, classifying, explaining, inferring, etc. The item difficulty for each items can also be predicted. The multiple choice items for science, social study and Chinese subjects were created by AIG system and evaluated by experienced item writers. The result demonstrated that over 50 percent of items that created by AIG system can be used directly or need only slightly modified. The results of items difficulty prediction showed median correlation between AI prediction and real items difficulty. The application and implication of generative AI in AIG system were also addressed in this research.

Challenging & Preserving: Culture, Inter/Multiculturalism & Language

96195 | *An Analytical Study of the Difficulties Faced by Primary School Teachers in Teaching Arabic Language*
Nouri Alwattar, Kuwait University, Kuwait

The Arabic language plays a vital role in the educational systems of Arab countries, serving as a tool for communication and a medium for preserving cultural and religious identity. However, teaching Arabic at the primary level presents several challenges that hinder effective learning and instruction. This study explores the key difficulties faced by teachers in the first cycle of basic education when teaching Arabic. These challenges fall into three main categories: student-related difficulties, such as weak language readiness and lack of motivation; curriculum-related issues, including complex or overloaded content; and challenges linked to instructional objectives that may be unclear or unrealistic. Using a descriptive analytical method, the study surveyed a sample of 1,038 male and female teachers. The results showed that student-related difficulties ranked highest (average score 3.53), followed closely by curriculum content (3.52), and then instructional goals (3.43). The study highlights the urgent need to develop teacher training programs and revise Arabic curricula to better meet the needs of learners and support teachers in overcoming these obstacles.

97281 | *Revitalizing Hakka Heritage: The University's Role in Local Cultural Sustainability*
Chih-Hao Tsai, Cheng Shiu Universty, Taiwan
Chih-Fang Chiu, National Kaohsiung University of Hospitality and Tourism, Taiwan

This study critically examines the role of higher education institutions in fostering collaborative governance for local cultural sustainability, with a specific focus on the revitalization of Hakka cultural heritage in southern Taiwan. Adopting an interpretive case study methodology, the research investigates a longitudinal university–local government partnership in Jiadong Township, Pingtung County. Empirical data were gathered through in-depth interviews with key university stakeholders and the analysis of relevant secondary materials documenting cultural activation efforts from 2018 to 2025. The findings identify three interrelated factors underpinning effective cultural sustainability: the strategic allocation of collaborative resources, the active mobilization of local organizations and residents, and the cultivation of mutual trust among stakeholders. This research not only extends theoretical discourse on university–community engagement and collaborative cultural governance but also provides actionable insights for the design and implementation of sustainable cultural revitalization initiatives.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

100741 | *Preserving Taiwan's Indigenous Languages Through AI: Building Multilingual Platforms for Cultural Revitalization*
YiHao Hsiao, National Institutes of Applied Research, Taiwan
Chen-Yu Chiang, National Institutes of Applied Research, Taiwan
Chia-Lee Yang, National Institutes of Applied Research, Taiwan
Meng-Chi Huang, National Institutes of Applied Research, Taiwan

Taiwan is home to 16 officially recognized Indigenous groups and 42 distinct language varieties, many of which are critically endangered according to UNESCO. Facing rapid intergenerational language loss, this project aims to preserve and revitalize Indigenous languages through the development of AI-powered multilingual platforms. We work closely with Indigenous elders, linguists, educators, and local language promotion organizations to construct Taiwan's largest corpora for the Truku and Cou languages, capturing over 300 hours of high-quality audio recordings that preserve the voices and knowledge of fluent elders. These corpora serve as the foundation for training advanced AI models, including automatic speech recognition (ASR), text-to-speech synthesis (TTS), and machine translation (MT) between Indigenous languages and Mandarin. Beyond model training, we developed accessible tools such as a self-learning literacy platform and a conversational chatbot. These applications target youth engagement and support intergenerational transmission of linguistic and cultural knowledge. The project is rooted in principles of cultural sensitivity, Indigenous knowledge sovereignty, and community empowerment. Our platform is scalable and adaptable, with an explicit goal of expanding to all 16 Indigenous groups and their 42 language varieties in Taiwan. This initiative not only demonstrates the technical feasibility of applying AI to low-resource languages, but also highlights its social impact—empowering communities, strengthening cultural identity, and contributing to global efforts in linguistic diversity and cultural sustainability. By bridging modern technology and traditional knowledge, we offer a reproducible model for Indigenous language revitalization in the digital age.

Counselling, Guidance & Adjustment in Education

101411 | *Education and Career Aspirations of 15-year-olds in Asia: Some Insights from PISA*
Sean Tan, Ministry of Education, Singapore
Elaine Chua, Ministry of Education, Singapore
Vanessa Chua, Ministry of Education, Singapore
Wai Meng Jeffrey Chan, Ministry of Education, Singapore

Students' education and career aspirations play an important role in shaping their academic engagement and future outcomes (e.g., OECD, 2021). Research shows that youths form such aspirations early in adolescence, and these significantly influence their subsequent educational attainment and career choices (e.g., Hoff et al., 2022). Youths' education and career aspirations are in turn influenced by multiple factors. For example, research suggests that adolescents' career aspirations are increasingly influenced by global economic changes and technological advancement (e.g., Guo, 2025). In the Asian context, studies have also highlighted the significant role parental influence plays in shaping students' educational and career goals (e.g., Chen et al., 2022).

Building on this context, we used comparative data from the Programme for International Student Assessment (PISA) to examine the education aspiration and age-30 career aspiration of 15-year-old students in several East Asian education systems. We investigated students' educational goals and career preferences; how these have shifted over time and are aligned to current and future labour market needs; and whether there are differences across the systems. We also analysed how these aspirations are associated with contextual factors such as parental support, teacher-student relationships, and students' participation in education and career exploration activities. The findings could inform policy and practice for education systems and schools to support students in their educational and career planning.

101443 | *Mapping of Core Developmental Domains in Immigrant Children Through Network Analysis: Identifying Intervention Leverage Points in Low-Income Communities*
Birgit Leyendecker, Ruhr University Bochum, Germany
Julian Busch, Ruhr University Bochum, Germany
Clara Bleckman, Ruhr University Bochum, Germany

This study examined interconnectivity of core developmental domains (CDDs) and family environment factors in ethnically and linguistically diverse children from low-income communities using network analysis. Participants included 428 children (mean age= 8.45 years, SD= 1.31) at Time 1 with 75% holding non-German nationality and 88% speaking languages other than German at home (n= 417 children at Time 2). Network architecture of T1 and T2 remained stable across timepoints despite COVID-19 disruptions, suggesting robustness of cross-domain relationships. The network structures revealed two distinct clusters: cognitive-language domains and socio-emotional domains. Regarding family environment factors, home learning support demonstrated stronger centrality and closer associations with CDDs compared to families' basic care provision. Academic achievement emerged as a critical bridge node connecting separated clusters. Results highlight the interconnected nature of CDDs and identify strategic intervention points serving the developmental needs and fostering academic achievement of immigrant children from low-income communities. Our findings support family-centered approaches targeting home learning environments.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

Curriculum Design & Development

98125 | *Using the POED Inquiry Model Combined with Virtual and Physical Experiments to Develop a STEM Activity*
Jyun-Chen Chen, National Academy for Educational Research, Taiwan
Shian-Yun Lo, National Academy for Educational Research, Taiwan

"Learning by doing" is emphasized in science, technology, engineering, and mathematics (STEM) education; however, how this theory integrated with inquiry enhances learners' learning performance is unclear. Thus, the purpose of this study was to develop a STEM activity that adopted the Predict-Observe-Explain-Do (POED) inquiry model integrated with virtual experiments to enhance students' learning by doing. To examine how the POED inquiry model help students apply abstract concepts in the product-making process, a quasi-experiment with a pretest-posttest control group design was conducted. In the study, 104 seventh-grade students were selected and divided into either the experimental group (EG), which used the POED inquiry model with an e-learning system to operate virtual experiments, and the control group (CG), which received lectures and slides. The subject of the study was "building an electric boat". The results showed that the EG and CG students' learning motivation, learning performance, and hands-on ability improved. Moreover, the EG students with lower prior knowledge had a better learning performance. The STEM activity helped the students to construct their knowledge through the cycling phases of the POED inquiry model, and the virtual experiments enhanced the students' engagement in inquiry by providing digital resources to create a varied learning experience. This study further examined the POED inquiry model by highlighting the "Do" phase, which offered the students more opportunities to improve their learning by connecting abstract science concepts through the hands-on product-making process.

100822 | *Mathematical Modeling Activities for Developing Thinking-oriented Mathematical Competence*
Ting-Ying Wang, National Taiwan Normal University, Taiwan
Jing-Ting Weng, National Taiwan Normal University, Taiwan

This study aims to develop design principles for modelling activities that foster students' thinking-oriented mathematical competence, including systems, creative, critical, and reflective thinking, and to explore the characteristics of students' thinking during these activities. The designs draw on an enactivist perspective, which views mathematical understanding as an active, co-evolving process shaped through interaction with meaningful tasks and environments, and follow Yang's three strategies: metaphorizing, scaffolding, and motivating. Focusing on proportional reasoning in lower secondary school, the proposed principles are: (1) Metaphorizing: The design should identify real-world contexts suitable for description with a systems model; the context should comprise multiple elements and relationships, contain both relevant and irrelevant information, and be grounded in meaningful real-life situations. (2) Scaffolding: The design should support learners in identifying the elements, relationships, and overall structure of a systems model. (3) Motivating: The design should engage learners in translating real-world situations into mathematical representations, fostering their ability to construct systems models through the process of mathematizing. Clinical interviews with six seventh graders revealed: (1) Students' thinking was often disorganized, and frequently shifting between elements and relationships without maintaining a systematic perspective, likely due to the complexity of the systems. (2) Students preferred reasoning with concrete quantities rather than proportional relationships. (3) Students often apporached system-construction tasks through traditional problem-solving routines and focusing on recording procedures rather than integrating information into coherent models.
These findings highlight challenges in cultivating student thinking-orented competence within proportional reasoning.

101177 | *The Effect of Integrating Indigenous Scientific Culture and Learning Scaffolds into STEM Instructional Activities on Students' Problem-Solving Abilities*
Yu-Ling Lu, National Taipei University of Education, Taiwan
Chien-Ju Li, National Taipei University of Education, Taiwan
Wen-Tsen Luo, National Taipei University of Education, Taiwan

This two-year study developed STEM curricula and activities integrating Indigenous scientific cultural characteristics and problem-solving components, and examined their effects on Indigenous students' problem-solving abilities. Using experimental design and design-based research, teaching effectiveness between the two years was compared and instructional activities were refined. Participants were Indigenous students from one Indigenous-focused school and two multicultural schools (29 students in Year 1, 26 in Year 2). Each year included three course sessions, each with two 3-hour thematic activities using consistent teaching methods.
In Year 1, instruction followed Taiwan's Ministry of Education guidelines for problem-solving steps, integrating Indigenous culture, STEM concepts, and inquiry-based strategies with worksheets and assessments. Based on Year 1 results, Year 2 revised materials by adding scaffolding strategies: guided questioning, exemplar practices, and task decomposition. Students completed problem-solving tests with reliability and validity before and after instruction. Paired-samples t-tests analyzed within-year changes; ANCOVA was used to compare between-year outcomes, with the pre-test score as a covariate to control for inter-cohort differences.
Year 1 students showed no significant gains, while Year 2 students showed significant improvements. ANCOVA confirmed that Year 2 outperformed Year 1 in total problem-solving scores and all four sub-dimensions. The improvement likely stemmed from material refinements and scaffolds, which offered appropriate support and guidance, helping students overcome ability limitations. Additionally, culturally grounded inquiry activities enhanced cultural identity and motivation, deepening learning.
In conclusion, integrating scaffolding strategies and Indigenous scientific culture into STEM activities effectively enhances Indigenous students' problem-solving ability, suggesting feasible pathways for culturally relevant STEM education.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

Design, Implementation & Assessment of Innovative Technologies in Education

96897 | *Enhancing Argumentative Essay Planning Through Non-Generative AI Writing Assistant for EFL Learners*
Li-Jen Wang, National Central University, Taiwan
Ying Tien Wu, National Central University, Taiwan
Meng Chen Shen, National Central University, Taiwan
Yi Ju He, National Central University, Taiwan

The rapid growth of AI writing tools has transformed language education, yet most focus on text generation with limited pedagogical support. This study presents a custom-developed, instructor-guided online platform supporting first-year EFL students from diverse disciplines in writing English argumentative essays. The teacher interface allows instructors to assign tasks, monitor submissions, and grade essays. Students collaborate in an online discussion forum to co-construct arguments, then use an interface integrating an AI Writing Assistant and Writing Workspace side-by-side. The AI Writing Assistant, built on the paid ChatGPT API, employs bilingual Socratic questioning to scaffold idea development without generating text. Sixty-two students piloted the platform during a 90-minute session in Spring 2025. After use, students completed an 18-item Technology Acceptance Model (TAM) questionnaire measuring Perceived Usefulness (PU), Perceived Ease of Use (PEU), and Behavioral Intention (BI), plus two open-ended questions on helpful features and improvement areas. The questionnaire showed excellent reliability (Cronbach's α: PU = .945, PEU = .895, BI = .917) and strong positive correlations among constructs (PU–PEU: r = .76; PU–BI: r = .81; PEU–BI: r = .74, all p < .001), confirming usability and influence on continued use. Qualitative feedback was thematically analyzed, revealing appreciation for guided scaffolding and integrated collaboration and writing tools, with suggestions for more flexible responses. Initial findings suggest high usability and learner acceptance, supporting the platform's pedagogical alignment as an alternative to typical generative AI tools. Future research will include a control group to systematically evaluate impacts on argumentative writing quality and critical thinking.

96980 | *Navigating AI Literacy in Education: a Scoping Review of Generative AI's Impact on Writing, Learning, and Policy*
Jessica Chau Nguyen, Simon Fraser University, Canada
Michael Lin, Athabasca University, Canada
Daniel Chang, Simon Fraser University, Canada

Artificial intelligence (AI) assisted tools have been emerging in the academic community, yet much of the literature still relies on broad theoretical generalizations and empirical ambiguity. In our study, we have adopted the scoping review methods to systematically analyze 29 empirical articles about AI literacy published since 2021, with a specific focus on the multifaceted implications of AI-powered writing tools across various educational levels. This review investigates areas, such as how generative AI (GAI) tools like ChatGPT affect perceptions of academic integrity, achievements, and the evolving roles of teachers and students. Based on our preliminary analysis of these 29 studies, GAI tools have been viewed as a catalyst for increasing student engagement, writing quality, and achievements. In particular, among high-performing students, the use of GAI tools raises complex concerns for authorship, intellectual ownership, and ethical use. Methodologically, our scoping review has shown the diverse study designs and educational contexts in research investigating the effects of GAI. Our review thus offers a comprehensive overview of how AI writing tools are integrated and studied across different educational levels. Practically, our findings also highlight the importance of transparent policies and targeted training to ensure responsible and effective use of AI in academic writing and AI literacy. Consequently, the research emphasizes the critical need for ongoing research, methodological refinement, policy development, and adaptive pedagogical strategies to fully exercise AI's potential while maintaining academic standards and integrity.

98171 | *Design of a Creative Thinking and Problem-Solving Training Board Game with a GenAI Diagnostic Mechanism*
Shi-Chian Wang, National Taiwan University of Science and Technology, Taiwan
Yu-Chi Chen, Yuan Ze University, Taiwan
Huei-Tse Hou, National Taiwan University of Science and Technology, Taiwan

Creative thinking and problem-solving abilities have long been recognized as critical core competencies in the workplace. However, without realistic scenarios or practical experiences, it remains challenging to achieve effective learning transfer. This study designed and implemented an educational board game, "Six Hats Decision Meeting – Production Crisis", which a GenAI diagnostic mechanism. Learners were placed in a company facing production workforce shortages, taking on roles as department managers or specific job positions. Guided by the Six Thinking Hats creative thinking framework, they engaged in simulated meeting discussions to collaboratively develop optimal solutions. A GenAI NPC (non-player character) developed in this study acted as the facilitator, responsible for real-time diagnosis of discussion content. When learners deviated from the current Thinking Hat perspective, the GenAI NPC identified and explained these issues to maintain discussion focus and depth, thereby enhancing the effectiveness and systematicity of the discussions. A total of 20 learners participated in the empirical evaluation. The results showed that the board game significantly enhanced learners' learning effectiveness. Moreover, the mean scores of overall flow and game usability were significantly higher than the median score of the scale (i.e., 3), and learners experienced a moderate cognitive load, demonstrating the positive impact of this educational board game on learning. Additionally, 85% of learners believed that the GenAI judgments and explanations regarding the Thinking Hats had a positive effect on learning, providing precise assistance in making judgments during discussions, offering clear explanations, and helping learners better understand the principles of creative thinking.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

98616 | *Design and Preliminary Evaluation of an Interactive Form Technology-based Escape Room Music Learning Game with Contextual Spatial Clues Exploration*
Yu-Chun Tsai, National Taiwan University of Science and Technology, Taiwan
Huei-Tse Hou, National Taiwan University of Science and Technology, Taiwan

Lecture-based music teaching is often characterized by low student motivation and insufficient participation in the classroom, reflecting the difficulty in stimulating interaction and enthusiasm. Game-based learning can help to overcome these limitations of low motivation and low interaction, but it still faces the challenge of insufficient contextualization. In this study, we used Google Forms platform to develop an educational game called "The Sound of Your Presence", which was designed to build a realistic castle space for players to explore and embedded digital tools such as an online virtual musical instrument and Google Chrome Music Lab to assist players to enhance their listening skills while exploring the castle and listening to melodic music. In addition, e-books are used as scaffolds to provide timely knowledge of music history and theory. Players can explore and analyze the music in the game. The participants in this study were 40 Taiwanese high school students. The study measured the students' flow, acceptance, and cognitive load. It was found that the learners had a high level of flow and acceptance of the game; they did not have a high intrinsic and extrinsic cognitive load, and had a moderate germane cognitive load, which indicated that the game was effective in facilitating the players' thinking. In the qualitative survey, more than half of the learners mentioned that games can stimulate the learning experience, and more than thirty percent of them said that the clues and scaffolding e-books provided in the games can help them learn more about music.

98703 | *Augmented Reality Simulations in Organic Chemistry*
Yong Chua Teo, National Institute of Education, Singapore

This project demonstrated the use of Augmented Reality (AR) technologies to enhance the learning of complex stereochemical concepts in organic chemistry. Custom-designed AR simulations in the form of a mobile app were developed to provide immersive, multisensory experiences that extend beyond the limitations of physical models or standard 3D visualizations. By integrating stereoscopic visuals with haptic feedback, students engaged in interactive, real-time exploration of molecular structures, fostering deeper understanding of abstract concepts such as stereochemistry. Using the AR app, they explored topics including conformational isomerism, ring-flipping of cyclohexane, cis-trans isomerism, and assignment of R/S configurations to stereoisomers. This approach allowed students to build new knowledge by interacting with augmented environments that reinforce connections between theory and practical application. The immersive simulations cater to diverse learning preferences, offering visual, tactile, and exploratory elements to support different cognitive abilities. Importantly, students can revisit and learn the content anytime using this mobile tool, enhancing accessibility and flexibility in online learning. This offers a competitive edge by creating an interactive platform where students acquire knowledge in a digital environment. Furthermore, AR provides scaffolding to reduce cognitive load, helping students visualize and manipulate complex molecular structures with step-by-step guidance. This supports the development of higher-order thinking skills, encouraging learners to apply, analyse, and evaluate 3D molecular structures within an experiential, inquiry-based context.

101015 | *Exploring Educational Transformation in Latvian Schools – Aligning Space, Technology, and Pedagogy*
Zinta Zālīte-Supe, University of Latvia, Latvia
Linda Daniela, University of Latvia, Latvia

As educational settings evolve beyond traditional classrooms, there is a growing shift toward technology-enhanced, learner-focused environments that support collaboration and creativity. This study investigates the core characteristics of Archetypal Attributes for Knowledge Environments in Latvian schools, based on survey data from 114 institutions and interviews with nine educators. The findings reveal persistent disparities in resource allocation, particularly between urban and rural schools, with key barriers including outdated infrastructure, limited funding, and insufficient teacher training. While digital tools and interactive technologies are increasingly present in classrooms, their effective use is hindered by a lack of flexible learning spaces and specialized, subject-oriented professional development. The research underscores the need for an integrated approach that unites pedagogical strategies, technological advancement, and adaptable spatial design to create inclusive, future-ready learning environments. The study also finds that smaller schools tend to have a higher ratio of digital devices per student, whereas urban schools are better equipped with robust IT infrastructure and dedicated technical staff. Still, schools across both settings struggle to provide flexible, collaborative learning areas. Bridging these gaps is critical to ensuring equitable access to enriched educational opportunities for all learners. Ultimately, the research advocates for a systemic transformation that aligns learning spaces, instructional practices, and digital tools to promote educational innovation and equity throughout Latvia's diverse school landscape.

101091 | *Exploring Taiwanese Middle School Students' Mathematical Creativity and Attitudes Toward AI Collaboration*
Lan-Ting Wu, Taichung Municipal Shin-Kuang Junior High School, Taiwan

Creativity is recognized as a key competency of the 21st century, not only emphasized in the OECD's PISA assessments but aligned with Taiwan's national curriculum policy. With the rapid development of technology, artificial intelligence (AI) has become deeply embedded in daily life. However, the impact of AI on junior high students' learning experiences and the cultivation of creativity in educational contexts remains underexplored. This study adapted the creativity questionnaire from PISA 2022 to examine students' performance and attitudes toward mathematical creativity across six dimensions: creative self-efficacy, self-assessment of creative output, attitudes and dispositions toward creativity, affective and attitudinal aspects of AI collaboration, learning motivation and perceived classroom support, and tolerance for failure. Participants included 91 junior high school students selected through purposive sampling, and data were collected through an online survey via Google Forms. Preliminary results indicate that over half of the students strongly believe that creativity can be cultivated, yet they lack confidence in generating creative mathematical ideas, problem-solving strategies, and creative problem-solving abilities. In contrast, they demonstrated high confidence in their willingness to try new approaches and in their ability to recognize and appreciate creative work. While nearly all students (76.9%) had interacted with OpenAI and expressed positive attitudes and high expectations toward AI collaboration, almost half (45%) reported uncertainty about how to formulate effective questions to obtain satisfactory responses. These findings highlight a gap between the frequency of digital interactions and the quality of inquiry, offering empirical insights for the design and implementation of AI-integrated creativity education.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

101101 | *Development of an Exploratory Heritage Educational Game Integrating SVVR Scenarios, Narrative Scripts, and Generative AI Characters*
Ti-Chieh Lin, National Taiwan University of Science and Technology, Taiwan
Hung-Yu Chan, National Taiwan University of Science and Technology, Taiwan
Huei-Tse Hou, National Taiwan University of Science and Technology, Taiwan

Information integration and critical thinking skills are essential core competencies in cultural education. This study combines generative AI (GenAI) characters with Spherical Video-Based Virtual Reality (SVVR) technology to design a digital learning game that integrates knowledge of military dependents' village culture with puzzle-solving mechanisms. Players will assume the role of a grandson returning to the military village of Forty-Four South Village in Taipei City. By exploring the environment and objects within the SVVR military village and engaging in dialogue with the GenAI grandfather character, players can inquire about the grandfather's memories to compare information, piece together clues through reasoning, and recover the grandfather's lost videotape. This process enhances immersion and understanding of the culture of military villages. A total of 17 learners participated in the empirical evaluation of this study. The findings revealed that learners experienced a high level of flow (M=4.10) and moderate anxiety (M=2.01) while playing the game. extrinsic cognitive load was relatively low (M=1.45), indicating that the interface design did not impose additional burdens; however, germane cognitive load was relatively high (M=4.41), suggesting that learners were willing to invest extra effort in reasoning and integrating clues. Among them, 88.2% of learners believed that the game deepened their impression of the village, and pointed out that AI grandfather clues played a key role in reasoning. Additionally, 76.5% of learners were willing to visit the village in person as a result. This study combines GenAI and SVVR to provide an innovative model for historical and cultural education.

101171 | *Design and Preliminary Evaluation of a Psychological Counseling Training Game Using Generative AI Virtual Characters Based on Situational Learning*
Hsi-Min Tu, Teacher Chang Foundation, Taiwan
Ya-Ling Wang, National Taiwan Normal University, Taiwan
Chih-Chung Chien, MEG Innovation Co., Ltd., Taiwan
Pei-Ching Ngu, National Taiwan University of Science and Technology, Taiwan
Yen-Ting Ho, National Taiwan University of Science and Technology, Taiwan
Huei-Tse Hou, National Taiwan University of Science and Technology, Taiwan

The recommended teaching strategy for psychological counseling training involves providing repeated training opportunities; however, the practical cost of implementation is high. Digital virtual simulations and game-based learning are expected to provide highly motivating, repetitive, low-cost training opportunities that are not restricted by time or space. This study employs the situational scaffolding-oriented generative AI virtual characters module developed by our team to design an educational game aimed at training psychological counseling. Players assume the role of a psychological counselor and conduct counseling sessions with AI characters within a limited timeframe, with the goal of eliciting positive responses from the characters. The participants in this study were 19 individuals who had completed the reserve training program in Taiwan. The research findings indicate that participants exhibited high of flow and did not experience excessive anxiety. They found the experience enjoyable and user-friendly, expressing a willingness to repeat the activity. Additionally, qualitative feedback revealed that over half of participants believed the activity aided in understanding empathy skills (56%) and identifying emotional cues (61%). It was also perceived as more simulation than general-purpose GPT models (83%) and more focused on counseling (61%). Preliminary findings suggest, this study designed a generative AI-based psychological counseling training educational game can be used for repeated practice of counseling techniques at low cost, making it suitable as a pre-practice tool before real-person case simulations. Future improvements could include adding learning feedback and scaffolding guidance to enhance the usefulness and realism of the training.

101172 | *Integrating Generative AI Characters and Virtual Reality Clues for the Development of Educational Games for Nursing Clinical Reasoning Training*
Pei-Ching Ngu, Sijhih Cathay General Hospital, Taiwan
Chih-Chung Chien, MEG Innovation Co., Ltd., Taiwan
I-Chieh Mao, Sijhih Cathay General Hospital, Taiwan
Yen-Ting Ho, MEG Innovation Co., Ltd., Taiwan
Huei-Tse Hou, National Taiwan University of Science and Technology, Taiwan

Ward nursing staff must collect information for new patients and perform clinical reasoning for health assessment and nursing diagnosis, which requires realistic ward situations and case studies. Combining game mechanics with standardized patient simulations is expected to improve trainees' communication skills and problem-solving abilities and enhance motivation. This study investigates the effectiveness of an educational game combining GenAI and virtual reality in training nursing diagnostic reasoning. We developed a dual-role GenAI mechanism (GenAI playing the role of a patient uncle Sam and a senior nurse sister) and constructed a virtual reality room space through Spherical Video-Based Virtual Reality technology. The learning objectives of the game: learners take on the role of a nurse and interact through dialogues to perform health assessments and clinical reasoning on Uncle Sam, as well as consulting with another experienced GenAI nurse to gain expertise and solve problems. The study participants were 16 formal nurse practitioners in Taiwan. The results of this study showed that the study was highly useful in that the learners had a high flow and did not have a high external cognitive load, but only an internal cognitive load slightly above the median of the five-point Likert scale (i.e., 3), and that the difficulty of the tasks could be considered for simplification in the future. The qualitative feedback indicated that the mechanism could create realistic clinical situations (81.25%), improve interview assessment skills (93.75%), facilitate clinical reasoning (75%), reduce stress (87.5%), and increase concentration (81.25%).

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

101296 | *An Investigation of a Digital Inquiry Platform's Impact on Biology Learning and the Role of Self-Efficacy*
Chia-Hui Cheng, National Taiwan Normal University, Taiwan
Fang-Ying Yang, Graduate Institute of Science Education, Taiwan

The significance of scientific inquiry has long been emphasized in science education for fostering a deeper understanding of the nature of science. In Taiwan, the 12-Year Basic Education Curriculum Guidelines also highlight "inquiry and practice" as central elements in natural science learning. This study investigated the impact of a novel digital inquiry platform on the biology inquiry learning performance of high school students. Specifically, we examined how pre-existing science learning self-efficacy predicted or moderated performance, particularly among groups with different levels of science achievement. The platform was designed around a biology module on yeast fermentation rates and guided students through a four-stage inquiry process: (1) formulating questions and hypotheses, (2) planning experiments and gathering data from videos of all possible experimental conditions, (3) constructing arguments by comparing findings with initial hypotheses, and (4) communicating their inquiry process through poster presentations. Participants were 67 tenth-grade students from an all-boys senior high school in northern Taiwan, including a gifted group (n = 31) and a general group (n = 36). A Multivariate Analysis of Variance (MANOVA) was used to analyze pre- and post-test differences in inquiry learning performance, while a multiple regression model examined the predictive and moderating roles of self-efficacy on students' performance. The findings highlight the potential of the novel digital platform to support inquiry learning for students of varying achievement levels and underscore the significant role of pre-existing self-efficacy in shaping inquiry learning performance.

101308 | *Preserving Local Fishing Heritage with a VR Educational Game: Integrating Sustainability and Cultural Identity Mechanisms*
Ya-Hsin Cheng, Chihlee University of Technology, Taiwan
Yu-Cheng Lin, Chihlee University of Technology, Taiwan

Once a cornerstone of Taiwan's economic development, the fishing industry is now facing challenges such as marine resource depletion and labor shortages. As the SDGs and ESG principles gain prominence, preserving local fishing culture and fostering regional identity have become critical issues. The Benghuozi (sulfur fire fishing) practice in Taiwan Jinshan's Huanggang is a century-old, environmentally friendly fishing technique. Nevertheless, the practice now faces a transmission crisis due to a shortage of skilled labor. To promote local cultural identity and sense of belonging, this study designed a VR game centered on Huanggang fishing culture, where players engage in first-person role-play, enabling participants to simulate traditional fishing processes and explore attractions of Huanggang fishing port in an immersive setting. The participants were 21 students from a university of science and technology in northern Taiwan. After the VR experience, they completed a questionnaire and a qualitative survey. The results indicated that the VR experience significantly enhanced participants' sense of immersion in the Benghuozi culture and promoted stronger local place identity and dependence to Huanggang fishing port. Qualitative feedback further revealed that VR exploration facilitated a deeper understanding of the technical and cultural implications of the century-old environmentally friendly fishing methods, while fostering active learning motivation. Overall, this culturally embedded VR experience not only serves as a digital tool for cultural preservation but also possesses both educational and environmental sustainability value, thereby promoting sustainable development and the intergenerational transmission of intangible cultural heritage.

101477 | *Enhancing Junior High Students' Collaborative Learning Through Multi-User Virtual Reality*
Ting-ling Lai, Tamkang University, Taiwan

Virtual reality (VR) learning environments have been widely applied in education and professional training, yet how students collaborate in multi-user VR (MVR) contexts remains insufficiently understood. To address this gap, we designed an MVR escape game, Space of Force, aimed at enhancing junior high school students' collaborative learning in science education. The game contains five thematic units, and each unit includes two to three puzzles requiring students to apply core physics concepts in order to progress. In this case study, six groups of ninth-grade students, organized into teams of three, participated in the activity. Each student used an immersive VR headset (Meta Quest 2) and spent approximately 40–50 minutes collaboratively solving one unit of the game. Their interactions were recorded within the virtual environment, and multiple sources of data were collected. These included pre- and post-tests of science knowledge, self-efficacy surveys on collaborative problem-solving (CPS), and verbatim transcripts of in-game group discussions. A qualitative coding scheme was developed to analyze the transcripts and identify processes such as coordination, negotiation, and joint problem representation. Preliminary findings suggest that the game provided meaningful opportunities for students to practice CPS skills, engage in authentic dialogue, and collectively apply scientific reasoning. The results highlight not only the potential of MVR escape games to foster collaboration, but also the importance of carefully designed puzzles that balance challenge and accessibility. This study contributes both an analytical framework for examining CPS in VR settings and practical implications for integrating multi-user VR games into science education.

101477 | *Genetics of Developmental Dysplasia of the Hip as a Model for Technology-Enhanced Education*
Stefan Harsanyi, Comenius University in Bratislava, Slovakia
Lubica Milosovicova, Comenius University in Bratislava, Slovakia
Andrea Pastorakova, Comenius University in Bratislava, Slovakia
Boris Steno, Comenius University in Bratislava, Slovakia
Lubos Danisovic, Comenius University in Bratislava, Slovakia

Innovative approaches are required to bridge the gap between rapidly advancing biomedical research and traditional education. This project, initially focused on the genetic and epigenetic background of developmental dysplasia of the hip (DDH), was adapted into an educational framework that integrates authentic research outputs into the teaching curriculum. The design employs interactive modules that transform complex topics, such as gene polymorphisms and PCR-based diagnostics, into accessible, inquiry-driven learning experiences. Implementation combines virtual laboratories, digital case studies, and problem-solving simulations. Students engage with real genetic datasets, follow analytical pipelines, and assess the translational implications for patient care. This promotes active learning and enhances critical thinking, moving beyond rote memorization to authentic problem-based education. Assessment is achieved through a combination of mixed methods, including formative evaluation embedded in virtual platforms, performance analytics supported by AI-driven feedback, and summative assessments aligned with clinical and research problem-solving tasks. Initial feedback indicates higher engagement and deeper understanding of molecular medicine concepts compared to conventional instruction. By connecting biomedical research with technology-enhanced pedagogy, this project illustrates how integrating innovative tools into curricula can modernize science education, foster interdisciplinary competencies, and prepare students for the challenges of evidence-based healthcare and translational research. This research was conducted as part of the project funded by the EU NextGenerationEU through the Recovery and Resilience Plan for Slovakia under project No. 09I0X-03-V04-00357.

Education & Difference: Gifted Education, Special Education, Learning Difficulties & Disability

96201 | *Accessibility Helps Everyone: Creating Fully Accessible Writing Courses to Accommodate Every Student*
Sarah Faye, University of California Davis, United States

This praxis-focused presentation reports on initial findings from a Writing in Health class designed with accessibility at its center rather than ad-hoc, retrofit accommodations. Through qualitative coding of students' reflections that bring together neurotypical and neurodiverse voices, and through adapting strategies from disability studies scholars, this presentation will showcase how accessibility helps everyone. Increasing students' intrinsic motivation through a human-centered environment is a must for writers with cognitive disabilities. Thus, I meet with students in optional writing groups and practice body doubling to increase students' focus, as well as create writing time in class to build a community of writers; I also allow students to choose the readings that bridge their own interests with the class theme, as well as complete multimodal assignments on flexible deadlines. Additionally, I incorporate technology and AI tools (ChatGPT, Elicit.org, Goblin.tools) to enhance students' executive function through brainstorming topics with an AI tutor, parsing and organizing the research sources into categories and outlines, and breaking down tasks into their different steps. Initial findings show that all students benefit from an accessible course since all overworked students—lacking sleep and self-care due to their overwhelming science courses and recent international turmoil—find their executive function and cognitive faculties depleted. This class is a model for students going into medical professions on how to treat others' diversity with respect, as well as a call to shift how we teach professional writing courses to normalize the idea that we all need to be accommodated.

101452 | *Educational Awareness and Needs Regarding Individuals with Borderline Intellectual Functioning (BIF): Focusing on Jeju Island, South Korea*
Joonmo Yun, Jeju National University, South Korea
Jonghyun Lee, Jeju National University, South Korea
EunJi Jeong, Jeju National University, South Korea

In South Korea, individuals with borderline intellectual functioning are not classified as disabled and, consequently, do not receive welfare benefits designated for persons with disabilities. At the same time, they face challenges in academics and employment among the non-disabled population. The purpose of this study is to identify educational support implications for individuals with borderline intellectual functioning by examining perceptions and needs within the Jeju region. The study participants included people associated with borderline intellectual functioning individuals residing in Jeju, South Korea (14 parents, 60 service providers, and 79 teachers). The research employed quantitative analysis through surveys and qualitative analysis through interviews. The findings are as follows. First, parents reported significant difficulties related to the economic burden of treatment and insufficient school education, and they expressed considerable concerns about independence and interpersonal relationships in adulthood. These parents exhibited mild levels of depression based on depression scale scores. Second, service providers were most concerned about the difficulties individuals with borderline intellectual functioning face in social adaptation, interpersonal relationships, and independent living, strongly emphasizing the need to address the region's lack of awareness and inadequate support policies. Third, teachers also prioritized concerns about social adaptation and interpersonal relationships. However, although teachers believed in the concept of borderline intellectual functioning and these individuals' capacity to learn, they experienced challenges in implementing effective learning and behavioral management strategies. Finally, the study presents the implications and points for discussion derived from these findings.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

Education, Sustainability & Society: Social Justice, Development & Political Movements

96589 | *Sustainability of Indigenous Community Education Through Baduy Tribe Ethnomathematics: Integrating Local Wisdom in 21st Century Mathematics Learning*
Gida Kadarisma, Institut Keguruan dan Ilmu Pendidikan Siliwangi Bandung, Indonesia
Jagad Aditya Dewantara, Universitas Tanjungpura, Indonesia
Indah Puspita Sari, Institut Keguruan dan Ilmu Pendidikan Siliwangi Bandung, Indonesia
Anton Nasrullah, Universitas Bina Bangsa, Indonesia
Soeharto Soeharto, Badan Riset Inovasi Nasional, Indonesia

The sustainability of indigenous peoples' education is a crucial issue in facing the challenges of globalization and modernization, especially in maintaining cultural identity and local wisdom. This study explores the potential of Baduy ethnomathematics as a contextual approach in 21st-century mathematics learning. Through qualitative studies and ethnographic methods, this study examines the daily practices of the Baduy people that contain mathematical elements, such as geometric patterns in weaving, measurement systems in agriculture, astronomy, and traditional time calculations based on the customary calendar. The findings show that the Baduy people have a mathematical knowledge system integrated into their cultural and spiritual lives. These values have great potential to be adapted in mathematics learning that is more relevant, participatory, and based on local experiences. Integrating ethnomathematics in the curriculum enriches formal education and becomes a means of preserving culture and strengthening the identity of indigenous peoples. This study recommends developing a contextual learning model based on local culture and collaboration between educators, researchers, and traditional figures in compiling teaching materials. Thus, education for indigenous peoples is a tool for social mobility and a vehicle for sustainably preserving cultural heritage.

97298 | *Liminal Legality and Educational Inequality: The Long Road to Social Justice for Indonesian Migrant Children on the Sabah-Sarawak Border*
Iqbal Arpannudin, Universitas Negeri Yogyakarta, Indonesia
Iwan Ramadhan, Universitas Tanjungpura, Indonesia
Jagad aditya Dewantara, Universitas Tanjungpura, Indonesia
Sulistyarini Sulistyarini, Universitas Tanjungpura, Indonesia
Yayuk Hidayah, Universitas Yogyakarta, Indonesia

This study examines the relationship between the liminal legal status of Indonesian migrant children and the inequality of access to education they experience in the Sabah-Sarawak border region of East Malaysia. In the context of cross-border labor migration, many Indonesian migrant children grow up without clear citizenship, thus trapped in semi-legal conditions that limit their access to formal education. Through a qualitative approach with ethnographic field methods in migrant communities in Kinabalu and Kuching, this study highlights the dynamics of daily life, coping strategies, and the role of informal or community schools in providing alternative learning spaces. The results show that uncertain legal status has a direct impact on educational vulnerability: children face not only administrative barriers, but also social stigma and structural exclusion. Within the social justice framework, this study emphasizes the importance of recognizing the right to education as an inherent fundamental right, regardless of citizenship status. The study's conclusion recommends the need for bilateral cooperation between Indonesia and Malaysia and strengthening the role of NGOs and local actors in bridging this inequality as part of efforts to realize more inclusive social justice for migrant children.

Educational Policy, Leadership, Management & Administration

97015 | *A Study on the Construction and Enhancement Path of Global Competence Model for Engineering Postgraduates*
Qing Jin, Beihang University, China

The level of global competence is a key indicator for evaluating international talents. The study employs a mixed research approach, guided by the concept of a community with a shared future for mankind, and employs the Delphi Method to initially construct a four-dimensional model of global engineering competence for graduate students in engineering disciplines, encompassing 'knowledge construction', 'technology transformation', 'value negotiation' and 'practice iteration'. To further validate the model's rationality, exploratory factor analysis, confirmatory factor analysis and reliability and validity tests were conducted. The results support the four-dimensional model of global competence for graduate students in engineering disciplines, indicating that the research scale has good reliability and validity. Application of this scale to assess the global competence levels of 835 Chinese engineering graduate students revealed stronger performance in 'knowledge construction' but relative weaknesses in 'technology transformation' and 'value negotiation'. There are also significant differences in global competence levels among students of different genders and universities. Based on these findings, we propose that global competence training for Chinese engineering graduate students should: Adhere to the vision of a Community with a Shared Future for Mankind to perfect its theoretical framework; Develop a comprehensive curriculum through flexible course design as a key lever; Enhance global competence by activating domestic training and international exchange initiatives.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

100912 | *Study on the Promotion of Enhanced Teaching Curriculum Plans by Local Educational Administrative Agencies: A Perspective on Policy Instruments*
Kuo-liang Yen, National Tsing Hua University, Taiwan
Sih Sian Wu, National Tsing Hua University, Taiwan

The main purpose of the study is to explore from the perspective of policy instruments, how local education administrative agencies promote advanced teaching and curriculum plans. It investigates the policy translation by local education administrations, the types of policy instruments used, factors influencing the choice of policy instruments, as well as the challenges and improvement suggestions related to these policy instruments. Data were collected through document analysis and interviews involving 18 participants, including education administrators, curriculum supervisors, expert consultants, principals, and teachers from junior high and elementary schools. Key findings are as follows:
1.Factors considered by local education administrations when transforming higher-level Ministry of Education plans include local educational needs and characteristics, relevance of policy objectives, effective resource allocation, participation and recognition by school staff, plan review and advisory committee feedback, and evaluation and feedback mechanisms.
2.Apply six types of policy instruments: regulatory, financial, informational, organizational, capacity-building, voluntary instruments. They typically use a combination of these instruments to form a mutually supportive system during plan implementation.
3.Factors influencing the choice of policy instruments include policy goal relevance, local characteristics and environmental changes, local financial and technical feasibility, needs and acceptance by school teachers, and balancing effectiveness and efficiency.
4.Challenges faced policy instruments include low teacher participation, diverse needs for teacher professional development, gaps between policy coordination and execution, and the lack of established evaluation and feedback mechanisms. Suggested improvements include reducing teachers' workload, increasing teacher participation, improving communication mechanisms, and establishing objective evaluation and feedback systems.

101123 | *Professional Practice Within Institutional Contexts: Development and Challenges of Counseling Work by University Psychologists in Taiwan*
Ya-Ru Hsu, National Chengchi University, Taiwan
Fu-An Shieh, National Chengchi University, Taiwan
Xing-Zi Yu, National Chengchi University, Taiwan
Yong-Qin Hu, National Chengchi University, Taiwan
Ya-Ping Shih, National Chengchi University, Taiwan

This study investigates the institutional evolution and practical challenges of professional counselors in Taiwanese colleges and universities, with the aim of clarifying the professional roles and functions of counseling psychologists within the context of higher education. Adopting a literature review and document analysis methodology, the research systematically collects and organizes scholarly literature and practical reports related to campus counseling systems. It also references policy documents and reports issued by the Ministry of Education and other governmental bodies to supplement the understanding of institutional frameworks and operational practices. The study focuses on four key dimensions: the historical development of the counseling system, the current state of organizational structures and personnel deployment, challenges in professional practice, and recommendations for future development. Findings suggest that although Taiwan's higher education counseling system has gradually moved toward professionalization through policy initiatives and regulatory reforms, it continues to face significant practical challenges. These include gaps between pre-service training and on-site practice, ambiguous professional role recognition, the formalization and administrative misplacement of counseling work, insufficient institutional safeguards, and a disconnect between policy resources and frontline needs. Concludes with recommendations to strengthen the integration of training and practice, reconstruct professional identity for school psychologists, prevent the over-administration and formalization of counseling duties, enhance institutional protections, and improve the precision and effectiveness of policy resource allocation. The findings aim to deepen overall understanding of the institutional and professional development of college counseling systems in Taiwan and serve as a foundation for future policy discussion and academic inquiry.

101331 | *Linking Context and Educational Leadership: A Bibliometric Review*
Wen-Yan Oscar Chen, University of Taipei, Taiwan

Context plays a pivotal role in shaping educational leadership. However, its conceptualization and knowledge base remain underexplored. This study addresses three questions: (1) What is the volume, growth, and regional distribution of research on context in educational leadership? (2) Who are the most influential authors in this field? (3) What thematic patterns and intellectual structures characterize this body of research? To answer these questions, a bibliometric analysis of 296 publications indexed in Scopus was conducted. Descriptive statistics, citation, co-citation, and co-occurrence analyses were employed to examine research performance, thematic developments, and the intellectual foundations of the field. The analysis yielded four key findings. First, studies on context in educational leadership began in 1996 and have expanded steadily, with 9 publications in the 1990s, 69 between 2001 and 2010, 155 between 2011 and 2020, and 63 since 2021. The United States, China, Australia, the United Kingdom, and Thailand were the leading contributors. Second, the most influential authors include Philip Hallinger, Allan D. Walker, Alan J. Daly, Amanda Datnow, and Stephen Dinham. Third, frequently used keywords include principals, school improvement, educational change, accountability, teachers, trust, ethics, social justice, gender, and regional identifiers such as Asia and Australia, with nine thematic clusters identified. Fourth, the intellectual structure of the field is organized into nine schools of thought. This study contributes by clarifying how context has been examined in educational leadership research and by highlighting implications for advancing both scholarship and practice, thereby reinforcing the centrality of context in understanding and improving school leadership.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

Educational Research, Development & Publishing

96644 | *Investigating the Effectiveness and Learner's Perception of Scenario Based Learning*
Wei Xiu Sung, Nanyang Polytechnic, Singapore
Annie Ng Yin Ni, Nanyang Polytechnic, Singapore

The School of Applied Science at Nanyang Polytechnic employs scenario-based learning in its Pharmacotherapy module for the Diploma in Pharmaceutical Science. A Choose-Your-Own-Adventure format allows learners to make decisions in a virtual setting, simulating patient consultations and providing immediate feedback—an advantage over traditional physical settings with high instructor-to-learner ratios. To evaluate its effectiveness, an equivalent time series design was used, alternating traditional tutorials (No Treatment, NT) and scenario-based tutorials (Treatment, T) across three rounds. A pre-survey using the 7-point Likert scale Motivated Strategies for Learning Questionnaire (MSLQ) established baseline motivation levels. Post-tests followed each topic in both NT and T phases, with a final post-survey assessing motivational changes. Findings showed a significant increase in intrinsic motivation from pre-survey ($n = 44$, $M = 15.37$) to post-survey ($n = 23$, $M = 17.09$; $p = .028$). Task value also rose (pre-survey $M = 16.98$; post-survey $M = 18.23$; $p = .083$). A Kruskal-Wallis test revealed significant performance differences across treatment rounds, with T3 showing the greatest improvement ($p < .001$). A Spearman correlation indicated a positive relationship between task value in T3 and post-survey outcomes ($r(14) = 0.48$, $p = .062$). These results suggest that scenario-based learning significantly enhances intrinsic motivation and task value, positively impacting academic performance. The method shows promise for broader application across disciplines to boost learner engagement and outcomes.

97445 | *Generative AI in Vocational High School Design Cluster Practice Courses: Influences on Motivation and Effectiveness*
Shin Liao, National Taiwan Normal University, Taiwan
Pei-Yi Liu, National Taiwan Normal University, Taiwan
Hao-Wei Weng, National Taiwan Normal University, Taiwan

In recent years, artificial intelligence (AI) technologies have rapidly advanced and found extensive applications in image design, text generation, and interactive media, increasingly being integrated into educational contexts. Among these technologies, generative AI—characterized by real-time interactivity, multimodal content generation, and text-to-image conversion capabilities—has demonstrated significant potential as an instructional tool in vocational high school design courses. However, empirical research on the integration of generative AI in vocational design education remains limited, and the effects on students' learning motivation and academic performance have yet to be thoroughly examined. This study investigates the impact of integrating generative AI on students' learning motivation and outcomes in a computer graphics course at a vocational high school in Taiwan. An experimental design was employed, utilizing a cyclical learning model consisting of four stages: observation, summarization, questioning, and application. The course was conducted over two weeks, with three 50-minute sessions each week. Following the intervention, students completed an assessment of learning outcomes and a questionnaire on learning motivation. Analysis using paired-sample t-tests, one-way ANOVA, and Pearson correlation revealed that the integration of generative AI significantly enhanced students' learning outcomes. Although the gains in learning motivation were modest, the intervention resulted in tangible improvements in student learning outcomes.

98527 | *Designing an Educational Intervention to Improve Self-Management Abilities in Lung Cancer Patients After Video-Assisted Thoracoscopic Surgery*
Jin-Hee Park, Ajou University, South Korea
Jieun Han, Seoul National University, South Korea

This study aimed to develop an educational program to enhance self-management abilities in lung cancer patients undergoing video-assisted thoracoscopic surgery (VATS), based on Bandura's self-efficacy theory. The program was structured to reflect the four sources of self-efficacy: mastery experience, vicarious experience, verbal persuasion, and physiological/emotional regulation. Eight sessions were implemented from preoperative to 8 weeks post-discharge, combining face-to-face and telephone counseling. In Session 1, patients' health status and symptoms were assessed, and individualized self-management goals were established. Educational materials covering smoking cessation, nutrition, and respiratory rehabilitation were provided. Patients participated in breathing exercises and viewed mentoring videos featuring lung cancer survivors. Subsequent sessions included physical and psychological assessments, reinforcement of pain and symptom management strategies, emotional support through peer modeling, and personalized feedback. Tools such as pedometers, three-line diaries, and checklists were used to promote daily self-monitoring and behavioral reinforcement. The program fostered patients' self-efficacy through structured support, individualized education, and ongoing motivation. Mentoring videos, derived from real survivor narratives, effectively provided emotional support and recovery modeling. Consistent use of reflective tasks and feedback enhanced patients' engagement and self-regulation skills. This theory-driven, multi-session educational program offers a practical and personalized approach to improving postoperative self-management in lung cancer patients. It can be effectively applied in clinical settings to promote long-term recovery, self-efficacy, and patient empowerment following thoracoscopic surgery.

14:00-15:00 | Orion Hall (5F)
Tueday Poster Session 1

100992 | *Emotional Influences on Self-Regulation and Excessive Digital Media Use in Adolescents: Implications for Educational Settings*
Karla Hrbackova, Tomas Baťa University in Zlín, Czech Republic
Jakub Hladík, Tomas Baťa University in Zlín, Czech Republic
Anna Petr Safrankova, Tomas Baťa University in Zlín, Czech Republic

Adolescents today are exposed to intense pressures from the digital world, which is intertwined with their school and social lives. Excessive digital media use (EDMU) is an increasingly common problem that negatively affects not only their mental health and social relationships, but also academic performance and overall well-being. While most previous research has focused on cognitive and behavioral factors, less attention has been paid to the role of specific emotions experienced during digital media use. This study examined how various positive (e.g., joy, calm) and negative emotions (e.g., jealousy, anxiety) during digital media use influence EDMU through self-regulation. In a representative sample of 2,602 adolescents aged 11–16, we assessed the frequency of experiencing eleven specific emotions while using social media, gaming, or browsing the internet. Results showed that all emotions examined significantly weakened self-regulation of digital media use (e.g., joy: a = −0.065, p < 0.001; jealousy: a = −0.110, p < 0.001). In turn, self-regulation strongly predicted lower EDMU (b ≈ −0.42, p < 0.001). Negative emotions such as jealousy, distress, and loneliness additionally exerted direct effects on EDMU (e.g., jealousy: c' = 0.093, p < 0.001). Positive emotions did not have direct effects, but indirectly increased EDMU risk by reducing self-regulation. These findings suggest that emotional experiences are not merely consequences but also drivers of excessive digital media use. Educational institutions therefore have an opportunity to design interventions that not only strengthen self-regulation but also address emotional triggers, which may significantly contribute to preventing risky digital media use

101499 | *Personalized AI-Enabled E-Learning and Assessment for Dental Education: System Design and Evaluation Protocol*
Andrej Thurzo, Comenius University in Bratislava, Slovakia
Lubos Danisovic, Comenius University in Bratislava, Slovakia

Dental education faces persistent staffing constraints and rapidly evolving clinical knowledge. A web-based, AI-enabled learning and assessment system was deployed across two semesters in five dental modules (three preclinical, two clinical). The platform delivers multimodal items and adaptive quizzes, profiles individual strengths and weaknesses, and generates personalized study plans; instructors receive learning-analytics dashboards and secure test assembly tools. In a controlled cohort comparison (AI cohort n=106; conventional cohort n=108), primary outcomes were knowledge gain (pre–post), blueprint coverage, and 8-week retention. Secondary outcomes included time-on-task, perceived cognitive load and test anxiety, instructor grading time, item quality, and equity across achievement quintiles. Results: The AI cohort showed greater knowledge gain (+11.8/100 vs +6.0/100; Δ=+5.8 points; Cohen's d=0.48, p<0.001) and higher retention at 8 weeks (+9.2 percentage points, p=0.002). Blueprint coverage increased by 15% through adaptive test assembly. Student-reported test anxiety decreased by 0.6 SD (p<0.01) and perceived cognitive load by 0.4 SD (p=0.02). Instructor grading and test-prep time decreased by 41% and 37%, respectively. Reliability improved (Cronbach's α 0.86 vs 0.79), and 19% of high-error items were revised via analytics-guided curation. Equity improved: failure rates among the lowest baseline quintile fell from 28% to 14% (OR 0.42, p=0.01). Usability was high (SUS 81.2); 86% of students preferred the adaptive workflow, while oral/practical exams remained for integrative reasoning. Conclusion: An ethically governed, adaptive AI system produced meaningful gains in learning, retention, efficiency, and fairness, offering a scalable, pandemic-resilient assessment infrastructure for dental education.

15:30-16:30 | Orion Hall (5F)
Tueday Poster Session 2

Foreign Languages Education & Applied Linguistics (including ESL/TESL/TEFL)

96381 | *Creating an Inclusive, Accessible, and Supportive Foreign Language Learning Environment for Students with Disabilities*
Tanya McCarthy, Kyushu University, Japan

This presentation aims to bring attention to barriers students with disabilities (SWDs) face in the second language classroom and improve teachers' understanding of how to provide "reasonable accommodation" for various disabilities. Today, most higher education institutions have a support center for SWDs, but for the most part, if a teacher is not directly contacted about a SWD, these support centers remain largely unknown to language teachers. To help bridge the gap between the disabilities support center and the foreign language classroom, a survey with 12 open-ended questions was given to the staff at a student disability support center. Survey questions sought to identify types of disabilities that foreign language teachers were expected to accommodate, what kind of professional training teachers needed (if any), and how they should adapt their teaching approach and learning materials to accommodate specific disabilities. First, a framework was created showing the step-by-step procedure from enrolment to the classroom to help teachers understand the services and support offered. Following this, the support center provided practical advice on classroom management for various disabilities which was made into a reference pamphlet. Through this presentation, the researcher hopes that attendees who have little or no experience with teaching SWDs can gain a deeper understanding of the general process and how they can change their teaching style and manage their classroom more effectively to accommodate students of varying abilities.

96841 | *Flipping the L2 Classroom: Peer Teaching with Student-generated Materials*
Matthew Armstrong, Kyushu University, Japan

This study examines learner perspectives of student-generated materials (SGMs) in the second language classroom. In this research project, students took on the role of the teacher in a 'flipped' approach. 22 students were given an open-ended survey after leading discussions asking them about the positive and/or negative aspects of creating materials and leading discussions, and what they learned about themselves after the experience. Participants were further asked how they felt about the experience of being led by peers instead of the teacher. On the positive side, results showed that student engagement with the learning materials had increased, student leaders were able to understand how to deeply research their chosen topic in the L2, peers developed a stronger relationship, and students could recognize areas to improve in their own speaking skills through observing others' discussions. These successes led them to taking more responsibility for their learning and feeling more empowered. On the negative side, students reported that selecting topics and writing meaningful discussion questions was challenging due to the wide range of proficiency levels in the classroom. They also found it difficult to take notes and synthesize information from many groups. On the whole, students found the experience beneficial to critically understanding their academic discussion skill level, but also reported that they needed teacher guidance to help organize lessons and further build their skills. During this presentation, examples of SGMs will be shared with attendees to encourage them to try this alternative teaching approach in their L2 classrooms.

96861 | *Engaging EFL Learners in EMI Writing: A Validation Study of the T-CLEA Framework*
Li-Jen Wang, National Central University, Taiwan
Ying Tien Wu, National Central University, Taiwan

In many English as a Medium of Instruction (EMI) contexts, English for Academic Purposes (EAP) writing courses are increasingly expected to cultivate not only rhetorical competence but also global awareness and collaborative thinking. These demands are particularly salient in multilingual, digitally mediated classrooms. To address this need, this study introduces and validates the T-CLEA framework—Technology-assisted Collaborative Learning Engagement in Argumentative Writing—which captures EFL learners' engagement across three interrelated domains: English Writing Challenges (EWC), Student Issues on Global Topics (SIG), and Perception of Collaborative Argumentation (PCA). Grounded in self-determination and collaborative learning theories, the 18-item instrument, based on a 5-point Likert scale, was developed through expert consultation and piloted with 227 undergraduate EFL students from diverse academic disciplines at a Taiwanese university. Exploratory and confirmatory factor analyses demonstrated strong structural validity (CFI = .943, RMSEA = .059, SRMR = .059). Findings showed that students with higher global awareness and stronger collaborative dispositions reported fewer writing challenges, indicating that rhetorical, topical, and interpersonal engagement are mutually reinforcing. Although the study primarily focused on instrument development, the results suggest that T-CLEA holds promise as a diagnostic tool for responsive writing instruction. Future research may explore how SIG and PCA profiles can inform topic selection and collaborative design in multilingual and EMI-based EAP classrooms. In addition, longitudinal and cross-cultural studies are needed to examine how learners' engagement evolves over time and across contexts, and how T-CLEA scores may correlate with writing performance, self-efficacy, or instructional interventions.

97095 | *From Assistant to Advocate: Rethinking the Role of Foreign Language Teachers in Japan's Global Era*
Pilar Gutierrez, Aichi Toho University, Japan

As Japan moves toward greater internationalization, the role of Assistant Language Teachers (ALTs) has expanded beyond classroom assistance to encompass cultural ambassadorship, curriculum innovation, and student mentorship. Drawing on interviews with four educators from diverse backgrounds, this article explores the changing landscape of ALT work in Japan. The findings highlight three key developments: first, the evolving responsibilities of ALTs that challenge outdated definitions of the role; second, the increasing diversity of Japan's population and school environments; and third, the potential of ALTs to bridge cultural gaps and foster inclusion in both educational and social contexts. Despite ongoing challenges such as limited job stability and uneven professional support, ALTs are increasingly positioned to contribute meaningfully to Japan's global future.

100623 | *The Effect of a Passive Voice Grammar Checklist on the Writing Performance of Mathayom Suksa 4 Students*
Jidapa Tararom, Suranaree University of Technology, Thailand
Suricha Thanwisai, Suranaree University of Technology, Thailand

This classroom-based research aimed to enhance the writing skills of Grade 10 (Mathayom Suksa 4) students in an intermediate English class at Surawiwat School, Suranaree University of Technology. Initial writing assessments revealed recurring grammar errors, especially in the use of passive voice, despite students' familiarity with basic English grammar. The study hypothesized that integrating peer feedback with a passive voice grammar checklist could improve accuracy in writing. Students engaged in peer review using the checklist over three writing assignments. Results showed an increase in the number of students correctly using passive voice: from 58 students (70.73%) in the first task, to 64 (78.05%) and 71 (86.59%) in subsequent tasks. The mean writing score significantly improved from Task 1 to Task 2 ($p = .001$), though no significant differences were found between later tasks. The findings support the effectiveness of checklist-based peer feedback in improving grammatical accuracy.

100976 | *Effects of a Simulated Foreign Environment on English Conversation by Japanese University Students*
Noriko Aotani, Tokai Gakuen University, Japan
Shin'ya Takahashi, Tokai Gakuen University, Japan

Our study, presented at the 16th ACE, clarified that a simulated English environment promoted EFL learners' willingness to speak. They produced more English utterances while viewing a video of city-walking in New York City (NYC) than in Tokyo (TKY). The present study aims to reinforce this finding by examining the same effect on EFL learners' more natural communication; i.e., conversations with others rather than soliloquies. In the planned experiment, paired participants will view videos of a city-walking in NYC or TKY, and will be instructed to have a conversation. The experiment consists of two parts, each involving both NYC video and TKY video. At the beginning of the second part, participants are additionally instructed to perform the task as if they introduce the street to fictious viewers of the video. The videos are projected onto a hemisphere screen with 130cm in diameter so that participants get a virtual-realistic experience. Their recorded utterances are segmented into meaning units, the smallest unit of words that makes sense, and each unit is classified as either an objective description of what is shown in the video or a subjective expression of what the participants feel and think. In addition, we analyze participants' introspection reports on their impressions of the task in detail. We expect the results to show that participants engage in more active conversation and feel less tense when viewing NYC video than TKY video. Furthermore, they will exhibit more subjective expressions in the second part of the experiment than in the first.

Higher Education

93753 | *Effects of Supportive Parenting Style, Academic Self-concept, Expectations, and Values on Mandarin Academic Achievement Among First-year Vocational College Students*
Yi Sun, Srinakharinwirot University, Thailand
Sittipong Wattananonsakul, Srinakharinwirot University, Thailand

This study examines the influence of supportive parenting styles, academic self-concept, and expectancy-value perceptions on Mandarin academic performance among first-year vocational college students. It investigates both the direct effects of supportive parenting on achievement and the indirect effects mediated by academic self-concept and expectancy-value constructs. Grounded in Wigfield and Eccles' expectancy-value theory, the research employs a quantitative, cross-sectional design. A randomly selected sample of vocational high school freshmen completed validated questionnaires assessing parenting styles, academic self-concept, expectancy-value dimensions, and Mandarin achievement.
Multiple regression analysis revealed that supportive parenting is directly linked to improved Mandarin performance. Additionally, academic self-concept fully mediated the relationship between supportive parenting and achievement, while expectancy-value components further mediated the association between academic self-concept and performance. Significant interaction effects between academic self-concept and expectancy-value perceptions underscore the cascading mechanisms through which parenting practices influence academic outcomes.
These findings highlight the dual roles of self-perception and motivational beliefs in the achievement process. The study concludes with theoretical implications for expectancy-value models and offers practical recommendations for family-school interventions in vocational education, emphasizing the importance of fostering supportive parenting and positive self-concepts to enhance academic success.

96302 | *Preservice Teachers' Perceived Effectiveness of Autonomy Support on Children with Educational Needs*
Ryo Okada, Kagawa University, Japan

In recent years, much attention has been paid to how to motivate students with diverse educational needs in regular classes. Some students struggle to maintain their motivation. Motivational research has revealed the positive effect of teachers' autonomy support on students' motivation. The purpose of this study was to examine the characteristics of beliefs regarding autonomy support for students with educational needs amongst Japanese preservice teachers. Participants were 214 Japanese undergraduates enrolled in teacher training courses. They evaluated the effectiveness of autonomy support for fictional students with and without educational needs in regular classes. General linear model analyses revealed that the preservice teachers rated autonomy support as more effective for both students who experience difficulties in daily classes and those who feel bored due to a mismatch between their abilities and class levels than for a general child. Controlling teaching was perceived as less effective for students with educational needs. Furthermore, preservice teachers with high controlled motivation perceived controlling teaching as more effective regardless of students' characteristics. These findings suggest that most preservice teachers understand the importance of autonomy-supportive teaching for diverse students at the level of educational beliefs. Teacher training programs should provide opportunities to learn concrete instructional strategies to support students with educational needs. On the other hand, informing preservice teachers with high controlled motivation about the evidence regarding the effects of autonomy support and control is also important.

15:30-16:30 | Orion Hall (5F)
Tueday Poster Session 2

96525 | *Dental Students' Perceptions of English-Language Education for Enhancing Communication Skills*
Soo-Yoon Kim, Yonsei University College of Dentistry, South Korea

This study explores dental students' perceptions of English-language education aimed at enhancing communication with foreign patients. A total of 137 Korean dental students participated and were categorized into two groups based on their direct patient care experience. A structured questionnaire consisting of 11 items across two domains was administered to examine students' views on incorporating English education for patient–dentist interactions. The findings reveal that most students recognized the growing importance of dental English education in response to the increasing number of foreign patients. Notably, students without direct clinical experience expressed a greater need for formal instruction in dental English communication. In addition, respondents overall demonstrated a positive attitude and strong interest in acquiring English communication skills relevant to clinical practice. This study suggests that (a) English instruction focusing on communication with foreign patients can serve as an effective means of language acquisition for dental students, and (b) integrating such training into the dental curriculum may enhance students' preparedness for globalized patient care. Further results and discussion will offer deeper insights into the role of English education in dental training.

97282 | *An Exploratory Study on University Students' Evidence Evaluation of Climate Change*
Shu-Sheng Lin, National Chiayi University, Taiwan

The reliability and validity of scientific evidence are critical for determining whether it can support a scientific claim or conclusion. The ability to evaluate such evidence represents an important indicator of university students' scientific and media literacy. This study explores how undergraduate students assess the reliability and validity of evidence in the context of global climate change. To investigate this, the researcher developed an open-ended instrument—the Climate Change Evidence Assessment Questionnaire. Using convenience sampling, data were collected from undergraduate students in southwestern Taiwan. Participants were categorized by academic background into science majors (N = 123) and non-science majors (N = 125). The results indicated that science majors outperformed their non-science counterparts in evaluating the validity of climate change evidence. In contrast, many non-science students confused evidence related to air pollution or acid rain with that supporting global warming. Interestingly, non-science majors more frequently proposed indicators for assessing reliability, with significant differences particularly evident in their focus on questioning content, cross-referencing data, and identifying information sources.

97522 | *The Gap Between Chinese Engineers' Communication Competencies Training and Industry Expectations*
Junlin Ji, Beihang University, China
Qijia Zou, Beihang University, China

This study examines communication in software engineering as a relational, context dependent practice. By applying mixed-methods approach—including large-scale topic modeling of 1,237 software engineering job postings and Repertory Grid Technique (RGT) interviews with professionals in China—we identify a disjuncture between industry expectations and the communicative competencies cultivated in university curricula. Six communication themes emerged from the job data, with stakeholder communication and cross-functional collaboration ranked highest in importance but lowest in graduates' preparedness. These gaps are not simply technical but epistemological, reflecting an enduring bias in engineering education toward clarity, correctness, and closed-ended solutions over dialogic reasoning and collaborative sense-making. While industry increasingly demands communication as a tool of alignment and efficiency, particularly within China's large, Western influenced tech firms, relational dimensions such as empathy, tacit knowledge sharing, and informal mentorship are systematically marginalized. These findings challenge prevailing assumptions that communication is a transferable or generalizable skill, suggesting instead that it emerges through participation in socially and organizationally embedded practices. It calls for moving toward a reflexive engagement pedagogies, with the aim of developing not merely employable graduates but communicative agents prepared for the multifaceted responsibilities of twenty first-century software work.

100856 | *The Mediating Role of Career Decision-Making Self-Efficacy and Outcome Expectations in the Relationship Between Perceived Social Support, Career Barriers, and Career Indecision: A Multi-Group Analysis Based on Gender*
Nilüfer Uyar, Anadolu Unıversity, Turkey
Şeyma Nur Yaman, Anadolu Unıversity, Turkey

In this study, a model based on the Social Cognitive Career Theory (SCCT) was tested to examine the mediating roles of career decision-making self-efficacy and outcome expectations in the relationships of perceived social support and career barriers with career indecision among university students, as well as potential gender differences. The study sample consisted of 785 undergraduate students (568 women and 217 men) enrolled in a public university. Data were collected using the Career Decidedness Scale, Career Decision-Making Self-Efficacy Scale – Short Form, Vocational Outcome Expectations Scale, Multidimensional Scale of Perceived Social Support, Career Barriers Inventory, and a demographic information form. Path analysis was conducted to test the proposed model and to examine the predictive relationships between the variables and career indecision. All analyses were performed using Mplus 8.3 software. The findings revealed that career decision-making self-efficacy and vocational outcome expectations significantly and sequentially mediated the relationship between career barriers and career indecision. However, the serial mediating role of these two variables in the relationship between perceived social support and career indecision was not statistically significant. The overall model fit indices indicated an acceptable level of fit, and multi-group analysis revealed no significant gender differences in the model. Taken together, the results suggest that career barriers negatively affect the career decision-making process, whereas enhancing individuals' self-efficacy and outcome expectations may buffer against these adverse effects. In this context, the findings are expected to contribute to a better understanding of the nature of career indecision and provide a foundation for the development of preventive, protective, or rehabilitative mental health services in the field of career counseling.

100956 | *From Science Identity to Epistemic Identity: Unpacking the Research Experiences on Taiwanese STEM Undergraduates*
Tzung-Jin Lin, National Taiwan Normal University, Taiwan

This study investigates the role of research experiences in shaping STEM undergraduates' science identity and epistemic identity. Science identity encompasses a sense of belonging and self-efficacy in science, while epistemic identity refers to beliefs about knowledge generation and validation. Qualitative interviews with 48 undergraduate students who have authentic research experiences suggest a potential development path from science identity to epistemic identity development. The participants revealed that research experiences fostered a sense of belonging, confidence in research abilities, and clarification of career goals, contributing to their science identity. Furthermore, the study found meaningful themes regarding epistemic identity development. Engaging in research led the participants to cultivate a scientific mindset, internalize norms, and negotiate disciplinary and functional identities. Some participants developed epistemic awareness and flexibility, appreciating diverse approaches to knowledge production and adapting to interdisciplinary problem-solving. The findings highlight the crucial role of undergraduate research experiences in shaping epistemic identity in STEM-related domains. By engaging with scientific norms, disciplinary perspectives, and varied methodologies, the STEM undergraduates may develop a more sophisticated understanding of knowledge generation and justification. Moreover, this study suggests that undergraduate research experiences provide a unique opportunity for students to bridge the gap between their science identity and epistemic identity. In sum, this study emphasizes the importance of research experiences in fostering epistemic growth and calls for further investigation into the epistemic dimensions of science identity development.

100991 | *The Role of Desire to Change Smartphone Use and Self-Regulation in Reducing Excessive Digital Media Use Among University Students*
Karla Hrbackova, Tomas Bata University in Zlín, Czech Republic
Julie Junastikova, Tomas Bata University in Zlín, Czech Republic

University students are considered a high-risk group for excessive digital media use due to a combination of academic pressures, increased stress levels, and frequent use of digital devices within their educational and social environments. Their lifestyle and study environment often require constant connectivity, which can lead to difficulties in regulating digital media use. Self-regulation is a key factor enabling effective reduction of excessive use; however, self-regulation alone may not lead to behavioral change if individuals lack the desire or motivation to limit their use. The aim of this study was to examine how the Desire to change smartphone use (DRSU) influences Excessive digital media use (EDMU) through Self-regulation (SR) in a sample of 886 university students. Results showed a positive correlation between DRSU and self-regulation ($r = 0.301$, $p < 0.001$), while DRSU had a significant negative direct effect on excessive use ($b = -0.057$, $p < 0.001$). Self-regulation also negatively affected excessive use ($b = -0.846$, $p < 0.001$). Mediation analysis confirmed that the relationship between the desire to reduce use and excessive use is partially mediated by self-regulation (indirect effect = -0.026, 95% CI [-0.033, -0.019]). Although self-regulation significantly reduces excessive digital media use, its effective application requires sufficient internal motivation; without the desire to change behavior, individuals with high self-regulation may not reduce excessive use. These findings highlight the importance of interventions that support both motivation to change and the development of self-regulation skills to effectively reduce risky digital media use among university students.

Knowledge Creation, Preservation & Access: Curation, Librarianship, Information & Archival Science

97306 | *Empirical Study on Measuring the R&D Capacity of University Research Teams Using Patent Indicators*
Ihsin Wang, National Cheng Kung University, Taiwan

This study aims to measure the research capacity of the R&D teams at National Cheng Kung University (NCKU) using patent indicators and examine the relationship between patent output and R&D input. By analyzing patent data from 2015 to 2024, the research conducts correlation and regression analysis between patent counts (applications/grants) and R&D funding, personnel, and other related indicators. It is hypothesized that patent counts reflect the innovative capability of university R&D teams, and the study also investigates the link between patent quality (such as citation counts) and technology transfer outcomes. The results show a significant positive correlation between patent numbers and R&D funding/personnel, and citation counts serve as a key indicator of patent impact and technology transfer potential. The study provides recommendations for enhancing patent quality and optimizing resource allocation, offering policy suggestions to improve the commercialization of innovation outcomes in universities.

15:30-16:30 | Orion Hall (5F)
Tueday Poster Session 2

Language Development & Literacy

95391 | *Beyond "Word-for-Word" Translations of Two Psychological Questionnaires from English to Hindi: Observations from India*
Apeksha Srivastava, Indian Institute of Technology Gandhinagar, India
Frederick L. Coolidge, University of Colorado Colorado Springs, United States

This study involved translating (Danielsen et al., 2015) two public health questionnaires from English to Hindi. The Hindi versions were preliminarily validated through discussions with ten adult Indian participants fluent in Hindi. Although the audience's native language may be associated with a better understanding of information, literal translations may be inadequate (e.g., Hindi of 'Has the cat got your tongue…' [क्या बिल्ली ने आपकी जीभ पकड़ ली है…] does not make sense). Findings revealed that "relatable" examples and metaphors (Taylor & Dewsbury, 2018) contributed to clearer explanations (example: 'क्या तुम्हारे मुँह में दही जमा है?' in Hindi better explains 'Has the cat got your tongue?'). Code-switching (alternating between two or more languages) emerged as a crucial factor. English was more effective "emotionally" in certain situations (example: 'sex' instead of यौन संबंध) and helped "better understand" specific words (example: 'potty' instead of मल). Easy-to-understand Hindi words (example: तालमेल instead of समन्वय for 'coordination') were prioritized so that the questionnaires are accessible to audiences with at least primary education. The process also highlighted deeper issues: Stereotyping (example: बच्चा for 'child' is not a gender-neutral term) and Positionality (researcher as insider/outsider). There is limited evidence of such studies from India. Data collection is in progress to ensure that these questionnaires are reliable and valid in Indian settings. Results will be presented at the conference. Such studies can provide critical insights into the importance of language choice, improving science communication and health education ecosystems.

Learning Experiences, Student Learning & Learner Diversity

95695 | *Assessing Student Learning Experiences at University of Makati During the Time of Disruption*
Junlor I Dacsa, University of Makati, Philippines
Nina Rhodora Anzures-Reyes, University of Makati, Philippines
Jennith Reyes, University of Makati, Philippines

The COVID-19 pandemic has precipitated a global educational crisis, compelling a shift to online and remote learning modalities. This study, qualitatively assessed the experiences and practices of senior high school students of the University of Makati - Philippines during this disruptive period. It explores the challenges and adaptations in the learning process. The research employs a descriptive-qualitative design, focusing on a purposive sample of 46 Grade 11 and 12 students. The study found that integrating educational technologies, accommodating diverse learning preferences, providing effective support structures, and promoting student-centered learning can enhance the educational experiences of STEM/HCP students during times of disruption, such as the COVID-19 pandemic. Strengthening faculty training, enhancing student support services, and promoting transparent assessment practices are recommended to optimize the educational experiences of STEM and HCP students during disruptions. The insights gained aim to inform educators, policymakers, and stakeholders in developing strategies to mitigate the impact of future educational disruptions.

97433 | *Exploring the Prepared Environment in Montessori Education and Reflecting on the Principle of Authenticity in Montessori Classrooms*
Hwamee Sing, National Cheng Chi University, Taiwan

This study aims to investigate the significance of the "prepared environment" in Montessori education and reflect on the principle of authenticity in Montessori classrooms. Employing literature analysis and field observations, the researchers visited five public and private Montessori kindergartens and corner-based learning classrooms in Taipei. The study compared the differences between these two types of classrooms in terms of child interaction, teacher roles, and the application of environmental resources. The research explored the appearance and function of Montessori classrooms, the educational significance of Montessori teaching materials, and the principle of authenticity in Montessori classrooms. The findings reveal that a Montessori classroom is a child-centered learning environment that emphasizes six design principles: freedom, order, aesthetics, reality and nature, interpersonal interaction, and cognition. Montessori teaching materials serve as crucial tools in the Montessori teaching method, characterized by five principles: isolation, gradual progression, preparedness, concrete abstraction, and error control. The principle of authenticity in Montessori classrooms stresses the use of real objects as teaching materials, allowing children to operate in authentic contexts to cultivate their cognitive, life skills, and social abilities. This study concludes that the "prepared environment" in Montessori education is a conducive learning environment for child development and is worthy of reference for early childhood educators.

15:30-16:30 | Orion Hall (5F)
Tueday Poster Session 2

97512 | *From Classroom to Career: Using Emotional Baggage Boardgame to Foster Growth Mindset and Creative Confidence in Internship Students.*
Angela Shueh Ng, Singapore Institute of Technology, Singapore
Mun Wai Leong, Singapore Institute of Technology, Singapore
Sunny Soh, Singapore Institute of Technology, Singapore
Bing Qiao Li, Singapore Institute of Technology, Singapore
John Sim, Singapore Institute of Technology, Singapore

How effective is the Emotional Baggage Board Game in fostering growth mindset and creative confidence among undergraduate students during their final-year internship? The World Economic Forum (2023) highlights the increasing importance of complex problem-solving, creativity, and emotional agility — skills often underdeveloped in conventional classroom settings. A dipstick qualitative study involving internship supervisors revealed that students, despite prior classroom training in growth mindset and Design Innovation, struggled with emotional resilience and creative problem-solving during internships. This sparked the introduction of a novel intervention: the Emotional Baggage Board Game (Ng et al., 2024) — a tabletop game designed to build emotional literacy, cognitive flexibility, and creative confidence. This study adopts a quasi-experimental pre-post control group design involving 150 final-year undergraduate students who are undergoing internships. The intervention group (n=100) will play the game during their internship, while the control group (n=50) receives no such exposure. Quantitative data will be collected using two validated instruments: the Growth Mindset Scale (Dweck, 1999) and the Creative Self-Efficacy Instrument (Tierney & Farmer, 2002). Comparative analysis will measure changes in mindset and creative confidence. This research contributes to the growing body of evidence on game-based learning in higher education. By embedding a reflective and emotionally engaging game into real-world internship settings, educators can better support students' transition from theory to practice. The findings aim to inform how structured play can nurture essential 21st-century competencies, particularly in enhancing emotional resilience, adaptability, creative problem-solving and peer support in young professionals.

98635 | *Enhancing Integrated Scientific Process Skills through Digital Interactive Laboratories: Evidence from Grade 7 Chemistry Students in Pasig City, Philippines*
Ruel Dimo-Os, Philippine Normal University, Philippines
Crist John Pastor, Philippine Normal University, Philippines

This study investigates the effectiveness of digital interactive laboratories (DILs) in developing integrated scientific process skills (iSPS) among Grade 7 chemistry students in Pasig City, Philippines. The participants were forty (40) Grade 7 students, consisting of both male and female learners, drawn from one public and one private secondary school. The inclusion of these two school types aimed to provide a comparative perspective on the potential of DILs across different learning environments. A quasi-experimental was employed to determine the impact of using DILs on students' acquisition of iSPS. Effectiveness was measured through performance-based tasks and rubric-guided assessments that evaluated students' ability to observe, hypothesize, experiment, interpret data, and draw conclusions. Findings revealed that the use of DILs significantly enhanced students' iSPS compared to traditional approaches, indicating that digital laboratories are valuable tools for improving inquiry-based learning in science education. Moreover, the integration of simulated digital experiments alongside hands-on laboratory activities was shown to optimize the development of higher-order process skills. The study emphasizes the importance of designing digital laboratory interfaces that explicitly target fundamental iSPS, while ensuring alignment with existing curriculum standards. It is recommended that policymakers and curriculum developers establish guidelines for the seamless integration of DILs into classroom practice, while also adopting adaptive strategies to address contextual challenges faced by diverse learners. Future studies are encouraged to expand the sample size, extend the duration of interventions, and explore the long-term effects of digital laboratory integration across different grade levels and school settings.

100223 | *Why Distant Advisors Shine Brighter: The Homophily Paradox of Knowledge Production in Soft Discipline*
Li Sun, Beihang University, China

Focusing on alters' status and organizational attributes in academic networks, this study spanning disciplines addresses two questions: How do heterogeneous academic networks shape doctoral students' knowledge production in soft disciplines, and how do they describe the supports and obstacles encountered across diverse relationship contexts? Grounded in the epistemological distinctions between hard and soft disciplines, the study employs an explanatory sequential mixed-methods design. First, ego-centric "research discussion networks" reported in questionnaires were analyzed using Zero-Inflated Negative Binomial Regression to quantify the impact of diverse network actors on publication output. Subsequently, thematic analysis of interviews with 11 doctoral students uncovered the mechanisms behind these quantitative patterns, focusing on three dimensions: network motivations, formation channels, and impact pathways.Findings reveal that both status-heterogeneous and organizationally-heterogeneous networks significantly enhance knowledge production for soft-discipline doctoral students compared to homogeneous networks. External faculty networks emerge as the core facilitators. Qualitative insights elucidate this dominance: While peers provide support, their direct contribution to core knowledge production is limited by knowledge exchange superficiality, cognitive convergence bottlenecks, and latent tensions. Although local faculty possess potential, their impact is statistically insignificant, constrained by disparities in knowledge structures and supervisory power dynamics. Crucially, effective ties with external faculty, built on trust, dissolve cross-organizational barriers. These ties deepen problem comprehension, generate novel insights, mitigate transaction costs and ownership anxieties, thereby significantly promoting knowledge production.Amid the wave of doctoral enrollment expansion, broadening access without equitable allocation of epistemic resources may perpetuate new inequalities. This imperative demands institutional investment in collaborative, system-integrated doctoral training frameworks.

15:30-16:30 | Orion Hall (5F)
Tueday Poster Session 2

Mind, Brain & Psychology: Human Emotional & Cognitive Development & Outcomes within Educational Contexts

96411 | *Neurological Soft Signs as Predictors of Psychological Resilience Across Adulthood: Age-Related Variations and Implications for Mental Health Education*
Sheng-Hsiang Lin, National Cheng Kung University, Taiwan
Chih-Wei Lin, National Cheng Kung University, Taiwan
Jin-Jia Lin, Chi Mei Medical Center, Taiwan
Chih-Chun Huang, National Cheng Kung University Hospital, Taiwan
Cheng-Ta Yang, National Cheng Kung University, Taiwan
Shulan Hsieh, National Cheng Kung University, Taiwan

Psychological resilience is essential for educational success, helping individuals overcome adversity and persist through academic and social challenges. Neurological soft signs (NSS) are subtle neurodevelopmental indicators linked to disrupted neural maturation, affecting the prefrontal cortex—crucial for executive function, attention, and emotional regulation. NSS and the neural mechanisms underlying resilience may vary across the lifespan, potentially influencing educational outcomes at different developmental stages. This study investigated the association between NSS and psychological resilience and explored how this relationship differs across age groups. Psychological resilience, assessed using the Connor-Davidson Resilience Scale (CD-RISC), and neurological soft signs (NSS), measured with the Neurological Evaluation Scale (NES), were examined in a sample of 165 individuals aged 18 to 65 years. To investigate age-related differences, participants were stratified into two groups using 45 years as the cutoff. Linear regression analysis was conducted to examine the association between psychological resilience and NSS. In the overall sample, the CD-RISC total score was negatively correlated with NSS. After adjusting for sex, age, BMI, education level, and years of work experience, higher NSS total scores were significantly associated with lower psychological resilience. When stratified by age group, no significant correlation between the CD-RISC and NSS scores was observed in the 18–45-year-old group. In contrast, a significant negative correlation was found in the 46–65-year-old group. These findings show that neurological soft signs are more strongly linked to resilience in middle-aged adults, highlighting the value of neurological screening and targeted psychoeducation for this population.

97205 | *Do Students with Higher Self-Esteem Seek More Help? A Gender-Based Study in Japan*
Aneesah Nishaat, Higashi Nippon International University, Japan

This study examined the relationship between self-esteem and help-seeking behaviors among Japanese university students, with particular attention to potential gender differences in these associations. A questionnaire survey was conducted with 225 Japanese university students (94 males, 131 females) aged 18-23. Participants completed the Rosenberg Self-Esteem Scale (1965) and the Help-Seeking Behavior Scale (Tamura & Ishikuma, 2001), which measures two factors: “Low Resistance toward Help” and “Desire and Attitude towards Help.” Pearson’s correlation analysis was used to examine relationships between variables. The analysis revealed significant positive correlations between self-esteem and help-seeking behaviors across all participants. A moderate positive correlation was found between “Low Resistance toward Help” and self-esteem, and a weak positive correlation between “Desire and Attitude towards Help” and self-esteem. Overall self-esteem and help-seeking behavior showed a moderate positive correlation. Gender analysis revealed notable differences: male students demonstrated strong positive correlations between self-esteem and all help-seeking factors. In contrast, female students showed only a weak positive correlation between self-esteem and “Low Resistance toward Help”. The findings suggest that self-esteem facilitates help-seeking behaviors, particularly among male students. Stronger correlations in males may reflect the greater influence of traditional masculine stereotypes and self-stigma that inhibit help-seeking when self-esteem is low. Female students’ weaker correlations may be attributed to their generally superior interpersonal skills and reduced stigma regarding vulnerability, making the direct impact of self-esteem less pronounced. The study underscores the importance of fostering self-esteem to encourage help-seeking, especially among male students in academic settings.

97707 | *Belief-Skill Interaction in Scientific Reading: Evidence from Eye Movements*
Yu-Cin Jian, National Taiwan Normal University, Taiwan
Jia-han Su, National Taiwan Normal University, Taiwan

This study examines how cognitive skill and motivational belief interact to shape children’s scientific reading, drawing on the Dual-Process Asymmetry Model (DPAM) to distinguish between real-time processing and post-task comprehension. Ninety-three Taiwanese fourth-grade students completed a reading-specific mindset inventory, a standardized comprehension pre-test, and eye-tracked readings of two multimodal science texts. Twelve eye-movement measures indexed attentional allocation, while comprehension was assessed through content-specific quizzes. Results revealed that reading ability robustly predicted both gaze efficiency and comprehension, affirming its role in early-stage processing and meaning construction. Mindset alone had minimal influence on eye movements but significantly interacted with ability in predicting comprehension—growth-oriented beliefs notably supported lower-ability readers. These findings suggest that belief systems modulate higher-order cognitive engagement rather than perceptual decoding. By combining psychometric, behavioral, and physiological data, this study highlights the neurocognitive mechanisms through which beliefs and skills jointly influence learning. It offers implications for mindset-informed reading interventions tailored to learners’ developmental profiles.

15:30-16:30 | Orion Hall (5F)
Tueday Poster Session 2

Nurturing Creativity & Innovation: New, Innovative & Radical Education

100965 | *Not Yet Ready? The Effectiveness of AI-based Education on Nursing Students' Clinical Competence—A Meta-analysis*
Seyeon Park, Chungnam National University, South Korea
Taehui Kim, Chungnam national University, South Korea
Jeongeun Lee, Chungnam national University, South Korea
Eunkyung Seo, Sejong Chungnam National University Hospital, South Korea

Background: Artificial Intelligence (AI) is gaining traction as a novel educational approach in nursing. Despite its increasing presence, evidence regarding its effectiveness in enhancing clinical competence remains scarce.
Purpose: This study aimed to evaluate the effect of AI-assisted educational interventions on clinical competence among nursing students using a systematic review and meta-analysis.
Methods: A literature search was conducted in CINAHL, Cochrane Library, Embase, and PubMed for articles published between January 2024 and July 2025. Based on the PICO framework, the population included nursing students, the intervention was AI-based education, the comparator was traditional instruction, and the outcome was clinical competence. Out of 204 articles initially retrieved, 182 remained after duplicate removal. After title/abstract screening and full-text assessment, three randomized controlled trials were included. A random-effects meta-analysis using RevMan 5.4 was conducted to calculate the standardized mean difference (SMD).
Results: The meta-analysis revealed a pooled effect size of SMD 0.51 (95% CI: 0.10–0.92), indicating significantly higher clinical competence in the control groups compared to those receiving AI-assisted instruction. Study heterogeneity was moderate (I^2 = 62%).
Conclusion: The findings suggest that current AI-based educational strategies may not yet fully support clinical skill acquisition in nursing students. From an educational perspective, this underscores the need to align AI interventions with the practical and interactive nature of nursing education. Further research should focus on pedagogically grounded AI designs to optimize learning outcomes in digitally evolving curricula.

101295 | *Knowing and Imagining as Inquiry in Tertiary-Level, Architectural Design Pedagogy – an Illustrated Narrative*
Daniel Gibbs, Deakin University, Australia

Recently, researchers in educational psychology have been called to explore when and how a potentially fruitful relationship could be constructed between direct-instruction and inquiry-based learning. This poster responds by using a trans-disciplinary approach to conceptualise such a relationship in the context of architectural design pedagogy. In architectural design pedagogy, inquiry takes on myriad different forms such as model making, writing, digital design, and drawing. It is generally contended that these forms of inquiry serve the purpose of developing domain-specific knowledge. However, this contrasts with bodies of research into human cognitive architecture that find inquiry to be best served by prior development of domain-specific knowledge. Here, an illustrated narrative is used to contend that the development of domain-specific knowing and imagining over time directly informs creative inquiry, not the reverse. Specifically, variations in the relationship between the formal and informal nature of line type, line density and line order in the drawing are used to illustrate how emphasis on formal direct instruction could give way to informal inquiry as expertise develops. Further, the methodology of the drawing mimics a form of direct instruction recently used in an architectural design studio; a single pen type a form of direct instruction facilitating focused inquiry and the development of human intelligence inherent in the manual drawing process. Throughout, the original naïve perception of architecture is under constant development and change, but importantly, never disregarded. When and how are thus contended, the potentially fruitful relationship culminating in a final phase of creative exploration and discovery.

Primary & Secondary Education

97421 | *Examining the Role of Green School and Islamic Religiosity on Secondary School Administrators', Teachers' and Students' Pro-Environmental Behaviour in Brunei*
Azimah Abdul Aziz, Sophia University, Japan

Human activities significantly contribute to environmental degradation, making it crucial to encourage pro-environmental behaviour (PEB) for a more sustainable future. Environmental education (EE) plays a vital role in shaping PEB, leading to the global emergence of Green Schools (GS), including in Brunei, aimed at cultivating environmental awareness and responsibility within school communities. Religion also influences PEB, which is relevant in Brunei, where Islam strongly shapes socio-cultural values, government policies, and national development. However, there is limited research exploring how Green School and Islamic religiosity (understood here as submission to one's religion) together influence PEB, especially in the Bruneian context. This study addresses the following questions: (1) How do teaching practices and the school environment in GS and non-GS influence the PEB of administrators, teachers and students? (2) How does Islamic religiosity influence their PEB? (3) Why did the earlier quantitative results show no significant difference in PEB between GS and non-GS participants, and only a weak positive correlation between PEB and Islamic religiosity? This presentation will share early findings from the qualitative phase of the study. Semi-structured interviews were conducted with 4 administrators, 8 teachers, and 8 student focus groups across two Green and two non-Green secondary schools in Brunei. Although data analysis is ongoing, the research is expected to offer valuable perspectives on how EE and Islamic religiosity jointly shape PEB. These insights may guide the development of more meaningful, values-based environmental programmes in Brunei and potentially countries with similar contexts.

101266 | *Environmental Education Using Open Schooling Perspective: Measuring Ocean and Water Literacy Among School Students*
Egle Butkeviciene, Kaunas University of Technology, Lithuania
Ricardo González, Kaunas University of Technology, Lithuania
Aistė Balžekienė, Kaunas University of Technology, Lithuania
Audronė Telešienė, Kaunas University of Technology, Lithuania
Vaidas Morkevičius, Kaunas University of Technology, Lithuania

Ocean and water literacy among children and adolescents is essential for fostering informed environmental stewards and supporting long-term conservation goals. Literature presents several conceptual frameworks on how to measure ocean and water literacy (Fauville et al., 2019, McKinley et al., 2023). These frameworks were used to assess ocean and freshwaters literacy of schoolchildren in the ProBleu project. ProBleu ("Promoting ocean and water literacy in school communities") is an EU Research and Innovation Funding Programme "Horizon Europe" funded project (Project No. 101113001), that aims to develop and offer educational resources and tools around the knowledge of aquatic ecosystems, based on Open Schooling methodologies. This poster presentation focuses on presenting the impact of open schooling methods on the ocean and water literacy of primary and secondary school students; and (2) recommendations on how open schooling methods might be used for environmental education. Methodology. Study aims to identify and measure the impact of educational projects that schools implemented under ProBleu funding schemes (interventions) on ocean and water literacy of students. Identification and measurement of the impact of interventions is based on a quasi-experimental design (Shadish et al., 2002) that assesses student's ocean and water literacy before the implementation of educational projects in schools and monitors the student's ocean and water literacy after the projects are implemented (so called One-Group Pretest-Posttest Design). The intervention period varies depending on the school project and activity plan, between 3 and 12 months according to the funding requirements.

Professional Training, Development & Concerns in Education

96926 | *Implementing Contextual Interventions to Improve Teaching Quality: Reflections from a Three-Year School Mentoring Program*
Sari Pratiwi, Guru Belajar Foundation, Indonesia

This study explores how contextual mentoring interventions can improve teaching quality and leadership in a low-cost private junior high school in rural Indonesia. Over three years, the program accompanied teachers and school leaders through cycles of reflection, planning, and collective action to rebuild post-pandemic stability and instructional confidence. Instead of relying on prescriptive models, the mentoring process followed the 5C Reflective Framework—Characterized Relationship, Comprehensive Concept, Constructive Continuity, Challenging Choices, and Community Context—adapted from the 5M leadership values introduced by Najelaa Shihab, founder of the Guru Belajar Foundation. This framework emphasizes humanizing relationships, conceptual clarity, sustained progress, purposeful challenges, and community empowerment. Data were drawn from classroom observations, reflection logs, and mentoring documentation. Results showed consistent teacher growth (average reflection scores 8.9–9.0 / 10), increased collaboration, stronger leadership identity, and a redesigned school governance system that improved teacher wellbeing and student enrollment. Findings highlight that contextual mentoring grounded in reflective values can generate sustainable, system-level change even in resource-limited school communities.

97269 | *Investigating Pre-service Teachers' Feedback of Activities Arranged in the "Mathematical Literacy Group"*
Ju-Fen Yao, National Chia-Yi University, Taiwan

Teachers' professional development is a key issue for students' learning. Teacher educators are expected to make contributions for teacher preparation and professional development. In order to empower pre-service teachers to design mathematical literacy-oriented assessment (MLA), a learning group named "Mathematical Literacy Group" was built in Chia-Yi University. The purpose of this research was to investigate pre-service teachers' feedbacks of activities arranged in this group, then to reflected on and revised these activities for empowering pre-service teachers. There were six activities arranged in this group, including listen to speeches related to design MLA, search and comment MLA, implementation of design MLA, comment on members' design of MLA, modify design of MLA, share test results of MLA. From the analyses of a questionnaire and interviews, two important findings were noticed that 1) regarding the group participants' preference for these six activities: "listen to speeches" and "share test results" were most popular, both of their scores in 4 point scale were 3.8 , "modify design of MLA" was not favored, the score was 3.2; 2) ranking the helpfulness of these activities for participants: "listen to speeches" was the most helpful activity for participants, the score in 4 point scale was 4, "implementation of design" and "share test results" were also helpful, both of their scores were 3.8, "search and comment MLA" seemed not very helpful for them, its score was 3.2. Based on the reasons participants gave, revision of activities and suggestions for empowering pre-service teachers to design MLA were proposed.

97523 | *Becoming a Knowledge Building Practitioner: Teachers' Reflective Practice in KB Teacher Training Program*
Su Xian Lau, National Chengchi University, Taiwan

The Knowledge Building (KB) Teacher Training Program aims to equip educators with the skills to become proficient KB practitioners. Acknowledging that every educator has distinct beliefs developed throughout their previous teaching experiences, this study highlights the importance of understanding teachers' thought processes and the challenges they face. Based on the research background, this study aims to understand the transformation process and challenges that teachers face when applying KB principles during learning, curriculum design, and in real-life classrooms. A qualitative method is adopted to analyze the dialogues in the Knowledge Forum. Using Schön's framework of reflective practice, this study examined the processes and challenges faced by two teachers as they transitioned into KB practitioners. The study found that the teachers frequently asked critical questions in their curriculum design and instructional practices, such as "Is the instruction I have designed solving students' learning problems?" "Does the response of students meet my expectations?" "Is this kind of teaching in line with my teaching philosophy?". These reflections align with Schön's reflective practice framework; the questions not only reflect teachers' concerns about the effectiveness of teaching and students' feedback but also demonstrate their efforts to harmonize philosophy and practice. Teachers transitioned from a rigid application of principles to a more flexible one, and their transformation process demonstrated a strong capacity for reflection and adaptability. This study suggests that to empower teachers to become KB practitioners, future research could focus on designing reflective practice principles related to KB principles based on Schön's framework of reflective practice.

101014 | *Scientific Thinking in Practice: Assessing Professional Development for In-Service Teachers in Latvia*
Linda Daniela, University of Latvia, Latvia
Zinta Zālīte-Supe, University of Latvia, Latvia

Integrating scientific culture into education involves embedding scientific principles, values, and thinking habits into teaching practices to promote critical inquiry, curiosity, and evidence-based reasoning. This approach encourages students to become independent thinkers and informed citizens. Teachers are central to this process, acting not only as knowledge transmitters but as facilitators who inspire scientific thinking across disciplines - not just in STEM subjects. Ongoing professional development is essential in equipping teachers with these skills. Activities such as reading scientific publications, participating in peer collaboration, and attending targeted training sessions can enhance their ability to foster a scientific mindset in students. This study explored the professional development opportunities available to in-service teachers in Latvia, examining how they contribute to cultivating a scientific culture. Data were collected from municipal sources and online platforms to analyze the structure and content of these programs. The evaluation employed Merton's CUDOS framework - communalism, universalism, disinterestedness, and organized skepticism - as a lens to assess whether the values of scientific inquiry are embedded in teacher training. The results revealed that many programs in Latvia emphasize transversal competencies but lack alignment with subject-specific scientific principles. The findings underscore the need for more coherent and scientifically grounded training offerings. These insights carry implications for policymakers and curriculum designers seeking to align teacher development with the demands of a science-oriented, knowledge-based society, ultimately promoting a more robust and equitable model of lifelong learning.

101323 | *The Professional Development of Bilingual Teachers in Taiwan: A Case of New Taipei City*
Tzu-Bin Lin, National Tawain Normal University, Taiwan

This presentation traces the evolution and purpose of Taiwan's bilingual education policy and advances a locally grounded model for teacher preparation. Although often dated to the 2018 "Bilingual 2030" wave, bilingualism in schooling extends back to earlier national plans to raise citizens' English proficiency. The policy's thrust is a remedial response to knowledge-heavy English instruction and scarce opportunities for authentic use. Conceptually, the difference between English teaching (delivered entirely in English) and bilingual subject teaching is that in bilingual subject teaching, subject teachers create meaningful opportunities for English use while keeping disciplinary learning primary. Rejecting one-size-fits-all imports, the study introduces the FERTILE model—Flexibility, Environment, Role modeling, Time, Instructional strategies, Learning-needs analysis and differentiation, and Engaging stakeholders. Based on the FERTILE model, the case of a professional development program operationalized in New Taipei City is discussed. Data are from the program documents and the feedback from teachers. The curriculum integrates course design, assessment, classroom English, and school-wide implementation with public lesson observation and reflective sharing, organized through interdisciplinary communities that include at least one English teacher. Assessment in bilingual classes prioritizes subject content, with language as a facilitative tool. The concluding remarks offer implications and research agendas for scaling sustainable, context-sensitive bilingual education in Taiwan.

Teaching Experiences, Pedagogy, Practice & Praxis

96747 | *Cinderella: An Unlikely Pathway to Feminist Agency*
John Maune, Hokusei Gakuen University, Japan

Fairy tales are notorious for their sexist tropes. The well-known fairy tale Cinderella clearly incorporates such tropes, which are ripe for feminist exploration. This poster will highlight a multi-week lesson plan that uses Cinderella as a starting point to help students critically examine sexist normative tropes and recognize the power that words—especially when unexamined—can wield. This lesson has been used with Japanese EFL students but would be applicable in almost any setting. Students begin by writing their unprompted thoughts about what they think feminism means, which they share before learning about feminism through a presentation and Emma Watson's short speech on the topic. Students then watch a short animation of Cinderella—a text version could be used instead. This is repeated, with leading questions used throughout to highlight many of the story's problematic elements that students may not have recognized during the first viewing. At this point, feminist vocabulary is introduced. Students then explore Martchenko's The Paper Bag Princess and the UN-supported Awake Not Sleeping fairy tales, both of which are designed to expose common sexist tropes. Finally, Branagh's film version of Cinderella is analyzed for the subtle changes that transform Cinderella from a passive damsel into a more modern woman of agency.

98182 | *Integrating Generative AI and SEL into Higher Education Curriculum: A Teaching Practice in "Picture Books and Emotional Expression"*
Ching-Hsuan Chang, Chinese Culture University, Taiwan

In the post-pandemic era, emotional literacy and psychological resilience have become increasingly valued in education. In Taiwan, Social and Emotional Learning (SEL) has been actively promoted as a national policy, emphasizing students' development of self-awareness, emotional regulation, and interpersonal competence—skills that are especially crucial in higher education settings. This study centers on the five core competencies of SEL in the design and implementation of a university-level course titled *Picture books and Emotional Expression*, offered in a counseling psychology program. The course integrated generative AI tools and employed shared picture book reading, experiential activities, and group-based creation to guide students in emotional exploration and narrative expression. Students used tools such as Canva AI and ChatGPT to transform their inner emotional experiences into visual imagery, ultimately producing original Picture books on themes such as anxiety, anger, loss, trauma, and psychological transformation. Data sources include classroom observation, student reflection texts, and picture book content analysis. Preliminary findings indicate that generative AI tools not only supported creative expression but also enhanced students' self-awareness and emotional communication. This study responds to the growing need to integrate SEL and digital innovation, and offers a practical teaching model for emotional education in higher education contexts.

15:30-16:30 | Orion Hall (5F)
Tueday Poster Session 2

100969 | *An Exploratory Study of Indicators Based on Elementary School Teachers' Perceptions of Creativity*
Hsiao-Chi Ho, Providence University, Taiwan

Creativity is a multifaceted construct commonly defined by originality and usefulness. Given the consensus that creativity is teachable, examining teachers' perceptions of creativity is essential, as these perceptions critically influence students' creative potential and talent development. This study aims to develop indicators of teachers' perceptions of creativity through in-depth interviews, providing a foundation for future research and practice. Six teachers with an average of 18.8 years of experience participated. Two were university faculty from education-related departments, teaching courses for prospective teachers, specializing in creative thinking and instruction. The remaining four were elementary school teachers teaching Mandarin, Mathematics, Arts, Integrative Activities, and Natural Sciences. All had experience designing and implementing creative teaching, with most having supervised students awarded in competitions including creativity as an evaluation criterion. Semi-structured interviews were conducted twice per participant, each lasting 60–90 minutes, following informed consent. The interview guide addressed definitions of creativity, traits of creative students, creative teaching processes, and supportive environmental factors. Transcripts were thematically coded and organized using NVivo. The results revealed four principal domains of indicators for teachers' perceptions of creativity: (1) creative student traits (both positive and negative), (2) creative teaching processes encompassing the pre-, mid-, post-, and entire teaching phases, (3) evaluation of creative works, and (4) supportive creative environments, including campus space, atmosphere, and technology-enhanced instructional support. Each domain comprised multiple sub-indicators. Future study will build on this preliminary study to develop and validate measurement instruments, thereby supporting the advancement of creative educational environments and teaching strategies.

101143 | *Integrating Experiential and Project-Based Learning in an Academic Writing Course: Design, Activities, and Research Context*
Min Yang, National Chung Cheng University, Taiwan

This presentation introduces Academic Writing, an elective course offered in a four-year Bachelor of Arts in English program at a public research-intensive university in Taiwan. The course aims to develop students' academic writing and basic research skills while supporting their exploration of academic goals. Drawing on experiential principles through project-based learning, the 16-week course balances structured guidance (e.g., mini-lectures, written feedback, and targeted activities) with student-led projects offer hands-on, learner-centered experiences, opportunities for experimentation and reflection, and engagement with real-world research contexts. Through instructor support and course activities, students conduct an empirical study on a self-selected topic and produce a 3,000-word IMRD-format research report as the final product of their project. This presentation will outline the theoretical foundations of the course design, showcase examples of activities designed to strengthen research and writing skills, and discuss implications for educators seeking to foster students' academic and professional development. Beyond its pedagogical aims, the course also serves as the research context for the author's NSTC-funded project, which will invite students to take part in interviews and share assignments after the course to examine their motivation and identity development in learning academic writing and research through experiential and project-based learning.

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Notes

Wednesday, November 26

Parallel Sessions

All times are Japan Standard Time (UTC+9)

Abstracts appear as originally submitted by the author. Any spelling, grammatical, or typographical errors are those of the author.

09:30 | Room 601 (6F)
Wednesday Onsite Parallel Session 1
ACE2025 | Challenging and Preserving: Culture, Inter/Multiculturalism and Language
Session Chair: Dennis Roble

09:30-09:55
97390 | *FOMO as a Motivational Force: Exploring Its Role in Encouraging Collaborative Creativity in Higher Education Teaching and Learning*
Dian Wahyuningsih, University of Southampton, United Kingdom

Fear of Missing Out (FOMO) is often associated with negative impacts such as academic anxiety, primarily when associated with social media use. However, in the context of hyper-connected digital learning, FOMO can also catalyse active engagement and collaborative creativity. This study aims to explore how lecturers utilise the FOMO phenomenon to encourage students' bold learning behaviour and support collaborative creativity at the university level. This qualitative study analysed in-depth interviews with 15 lecturers from three types of universities in Indonesia: research-based universities, teacher-training universities, and faith-based universities. Through a thematic analysis approach from the lecturer's perspective, three key strategies were identified to transform the Fear of Missing Out (FOMO) into a driver of positive academic engagement in digital learning. The first is brainstorming activities, the second is scaffolding or gradual support, and the third is digital portfolios. This research offers academic implications for future studies that require more in-depth investigations into how FOMO in digital learning affects academic creativity and resilience over a more extended period and across various disciplinary contexts.

09:55-10:20
94631 | *Cultural Integration Through Peer Collaboration: How PAL Programs Facilitate the Adaptation of Burmese Biomedical Science Students in Thailand*
Gary Torremucha, Rangsit University, Thailand
Edward Devere Bacon, Rangsit University, Thailand

This study investigates how Peer-Assisted Learning (PAL) sessions facilitate the cultural adaptation, intercultural competence, and personal development of Burmese international peer-mentors at a Thai university. Using a mixed-methods approach, quantitative data were gathered through structured questionnaires, while qualitative insights were derived from semi-structured interviews with peer-mentors. Findings reveal that PAL sessions significantly enhance peer-mentors' understanding of Thai culture, helping them adjust to local communication styles and social norms. Additionally, the sessions improved the mentors' leadership and communication skills, contributing to their personal and professional growth. However, language barriers and the need for more structured cultural adaptation resources were identified as challenges. This research provides valuable insights into the dual role of PAL programs in promoting both academic and cultural integration, emphasizing the need for enhanced intercultural training to support international students' success. The findings offer practical recommendations for improving PAL frameworks in higher education settings.

10:20-10:45
100248 | *'Ikhaya Lam' (My Home): Using Song to Enhance Indigenous/Afrocentric Approaches to History Teaching and Learning*
Tumi Ledwaba, North West University, South Africa

Home, a term as old as humanity, is problematic and ambiguous; the typical saying 'home is where the heart is' emphasises home as a space conducive to emotional interaction and interdependence, which contributes to an individual's emotional growth and well-being. Nostalgic sentiments of home encompass a desire to reconnect with family, both physically and emotionally, within a space where emotional expression has historically taken place. Bearing on the physical structure as a typical determinant of home, the notion, 'home is where I lay my head', in addition to the home as a space for emotional development, emphasises the fluidity of space and matter as the cornerstone for the making of home. Home is not fixated to a typical building comprising roof, windows, bricks, doors, and emotional belonging. In essence, a home becomes defined by the numerous factors that comprise both natural and man-made phenomena; a home can be anywhere. Wrestling with the notions of home, its challenges and ambiguities from diverse disciplinary underpinnings, scholars have broadly theorised multilocality as a critical component of people's conceptions and adaptations of home. Against this backdrop, this paper conceptualises and contextualises, amongst others, Khuzani Mpungose's hit song "Ikhaya lam" as a methodological lens to unpack the historical complexities of home, multilocality, and belonging in teaching histories of migrant labour and contestations of belonging embedded in colonial spaces.

10:45-11:10
98301 | *Ethnomathematics Researches in the Philippines: a Scientometric Analysis of Scholarly Trends and Developments*
Dennis Roble, University of Science and Technology of Southern Philippines, Philippines
Horencio Adaro Jr., University of Science and Technology of Southern Philippines, Philippines

This study used a scientometric analysis (combined systematic review and bibliometric analysis) to investigate the field of ethnomathematics research in the Philippines between 2009 and 2024. A total of 37 eligible publications were analyzed to determine emerging trends, thematic concentrations, publication growth, methodological preferences, and research gaps. Findings indicated a significant increase in scholarly output, especially after 2020, where ethnomathematical practices were the most studied theme (40.5%), followed by competence development (21.6%). Predominantly qualitative methodologies were used to record indigenous mathematical knowledge that is situated in the cultural artifacts, traditional games, and weaving practices of the Filipino indigenous people. Yet little emphasis was placed on the impacts of ethnomathematical integration in formal education and implementation challenges. Bibliometric evaluation indicated scattered research clusters, weak interdisciplinary collaboration, and limited representation in high-impact journals. This study recommends advancing toward applied research that integrates ethnomathematics into curriculum development, teacher training, and educational policy, while also addressing methodological diversity and institutional support. It offers a foundation for enhancing culturally responsive mathematics education in the Philippines.

09:30 | Room 603 (6F)
Wednesday Onsite Parallel Session 1
ACE2025 | Innovative Technologies in Education
Session Chair: Emmanuel Ufuophu-Biri

09:30-09:55
97280 | *Exploring Needs and Preferences for an AI-Enhanced Design Thinking Environment in Graphic and Multimedia Design*
Chanwit Sankumpa, Khon Kaen University, Thailand
Parama Kwangmuang, Khon Kaen University, Thailand

This study aims to explore the learning needs and preferences of undergraduate students and instructors for an AI-enhanced design thinking environment in graphic and multimedia design education. The research employs a mixed-methods approach, involving a survey of 150 undergraduate students majoring in graphic and multimedia design and semi-structured interviews with 12 instructors. The survey assesses students' perceptions of their creative thinking abilities, learning style preferences, and attitudes towards the integration of AI and design thinking in their learning process. The interviews with instructors focus on their experiences, challenges, and expectations regarding the implementation of an AI-enhanced design thinking environment. Quantitative data analysis reveals that 68% of the students believe that an AI-enhanced design thinking environment would improve their creative thinking skills, with 75% expressing a preference for interactive and collaborative learning activities. Qualitative findings highlight the need for a balance between technology-driven and human-centered approaches, as well as the importance of providing personalized feedback and support. The study identifies key considerations for designing an effective AI-enhanced design thinking environment, including the integration of AI-powered tools for idea generation and prototyping, the incorporation of collaborative learning spaces, and the provision of adaptive learning experiences based on individual needs and progress. These findings contribute to the development of innovative teaching and learning strategies that harness the potential of AI and design thinking to cultivate creative thinking skills in graphic and multimedia design education.

09:55-10:20
101216 | *Integration of Brain/Body–Computer Interfaces Through AI Algorithms for Didactic and Cognitive Enhancement in Primary Education*
José Luis Beltrán Sánchez, CAMM Michoacán, Mexico

The advancement of brain–computer interfaces (BCI) and body sensors in wearable devices has opened new possibilities for the design of personalized educational experiences. This study presents a proposal for integrating neurophysiological data—such as heart rate, heart rate variability, and electrodermal activity—with artificial intelligence algorithms to improve attention, motivation, and academic performance in primary school students in a semi-urban context in Mexico. The research was conducted with a fifth-grade group (20 students) in a public school, using a quasi-experimental intervention design. Each student wore low-cost smartwatches to record physiological variables during school sessions. These data were analyzed through machine learning models and supported by an AI agent (ChatGPT, in its free version), which generated instant feedback for the teacher and adaptive recommendations regarding pace, type of activity, and cognitive load level. Preliminary results show that feedback based on biometric data contributes to increased on-task behavior, reduced cognitive fatigue, and improvements in reading comprehension and mathematical problem solving. Moreover, both students and the teacher reported positive perceptions of the intervention, highlighting the motivating and humanized character of didactic personalization. This work provides evidence on the pedagogical, technical, and ethical feasibility of integrating accessible neurotechnologies with AI in school environments with limited resources and proposes a replicable model for similar educational contexts.

10:20-10:45
97982 | *Can AI Teach Like Socrates? an Exploratory Study of AI-Student Dialogue in Secondary Physics Education*
Krishan Sanjay Mahesh, Whitley Secondary School, Singapore

While generative artificial intelligence (GenAI) holds considerable promise for education, concerns remain that when used primarily for answer retrieval, it may encourage cognitive offloading rather than meaningful learning. This classroom-based study explores an alternative application of GenAI: whether a custom Retrieval-Augmented Generation (RAG) chatbot can engage students in Socratic dialogue to support deeper conceptual understanding in secondary physics. Nineteen Secondary 4 students in Singapore interacted with a RAG chatbot during a one-hour thermal physics lesson as part of their preparation for the GCE Cambridge O-Level examination. A thematic analysis of the chat transcripts uncovered three prominent patterns of interaction: identifying and addressing student misconceptions, scaffolding support for students with lower conceptual readiness, and challenging more advanced learners to deepen their learning. The chatbot delivered immediate and individualised feedback at scale, enabling dialogic interactions that are often unfeasible for teachers to conduct with multiple students in a typical classroom setting. However, the quality of these interactions was highly dependent on student input. In cases where students provided vague or tangential responses, the chatbot tended to shift towards more explanation-driven replies, limiting opportunities for sustained Socratic dialogue. These findings highlight the potential of AI tutoring systems to facilitate Socratic dialogue in secondary physics education. They also underscore the need for AI design principles that incorporate diagnostic questioning and adaptive scaffolding, as well as instructional strategies that equip students to engage meaningfully with AI tools in education.

10:45-11:10
101500 | *Bridging the Digital Divide: Strategic Deployment of Internet Technologies for Educational Transformation in Delta State, Nigeria*
Emmanuel Ufuophu-Biri, Delta State Polytechnic, Nigeria

The digital divide presents a significant barrier to equitable and quality education in Nigeria, with Delta State facing unique challenges in leveraging internet technologies for learning. This study thus aims to examine the level of funding for Internet Technologies and their deployment in tertiary institutions in Delta State, as well as the acceptance and adoption of the Internet. Over the past eight years, Delta State has made significant investments in providing internet and digital equipment to educational institutions in the state. There are six polytechnics, 13 universities and three colleges of education. The study employs the Technology Acceptance Model (TAM), which explains and predicts how individuals adopt and use technology based on their perceptions of ease of use and usefulness. We analysed existing literature and empirical data to investigate the deployment and usage of Internet Technologies in tertiary institutions in Delta State and identify probable key factors affecting implementation. Additionally, we employed the survey method and questionnaire to collect the data and then used descriptive statistics to analyse them. The tentative findings indicate that many tertiary institutions in the state have deployed Internet Technologies effectively, but there is apathy in usage by many staff and students; the level of Internet Technologies deployment and usage is not the same across the institution. We recommend adequate funding for the deployment of Internet Technologies within the institution and proper orientation for staff and students to utilise ICT effectively.

09:30-11:10 | Room 604 (6F)
Wednesday Onsite Parallel Session 1
ACE2025 | Higher Education
Session Chair: Chona Ryan

09:30-09:55
101446 | *Competencies in Transdisciplinary Thinking: Development of a Measurement Instrument for Tertiary Students*
Li Min Chong, Singapore Polytechnic, Singapore
Clarice Sim, Singapore Polytechnic, Singapore
Mark Lu, Singapore Polytechnic, Singapore

With the world and its challenges growing in complexity, singular disciplines are no longer sufficient to solve such multifaceted issues. Transdisciplinary Thinking, a skill to connect the dots among disciplines in order to transcend their boundaries, is increasingly recognised as a means for addressing many of today's complex social challenges through innovative problem-solving. Despite the increasing recognition of the importance of Transdisciplinary Thinking, there is no consensus on its conceptual definition, nor is there a validated instrument to measure this construct as a competency. This is a critical gap in transdisciplinary education, in the context of teaching, evaluating and assessing educational initiatives aimed at developing this important ability in students. In this paper, we tested out self-report survey items with a local and international expert panel (n = 8), refined the items based on expert feedback, and validated the survey with a tertiary student population (n = 100) through an exploratory factor analysis. The results suggest a unidimensional construct of Transdisciplinary Thinking with 19 items. The survey instrument is shared in this paper. At the the presentation, we will also share classroom activities and real-world student projects to help nurture students in Transdisciplinary Thinking. Our work on measuring Transdisciplinary Thinking and teaching it in a classroom setting will be beneficial to other educators seeking ways to evaluate and foster transdisciplinary education in their students.

09:55-10:20
101424 | *Artificial Intelligence in Higher Education Digital Transformation: A Systematic Literature Review*
Feng Chi Wen, Taipei Medical University, Taiwan
Hsin I Yung, National Taipei University of Technology, Taiwan

This study aimed to systematically investigate the applications, challenges, and future directions of artificial intelligence (AI) in higher education, with particular attention to the role of generative AI tools in the context of digital transformation. Following the PRISMA guidelines, a systematic literature review was conducted by retrieving relevant studies published between 2020 and 2024 from major databases such as Web of Science and Scopus. Based on inclusion and exclusion criteria, 21 peer-reviewed articles were selected and analyzed through qualitative coding and thematic analysis. The findings indicated three major results. First, AI applications in higher education were diverse but unevenly distributed. Adoption was more advanced in STEM disciplines and in institutions in Europe and the United States, while developing regions faced knowledge and resource constraints. Chatbots were the most widely used AI tools, and large language models such as ChatGPT had gained significant attention since late 2022. Second, institutions faced challenges including insufficient AI literacy among faculty and students, inadequate infrastructure, privacy concerns, and threats to academic integrity. Third, AI drove innovations such as personalized learning, automated assessment, and blended learning models, while future directions emphasized integration with emerging technologies, ethical frameworks, and the cultivation of AI literacy and critical thinking. AI was found to be profoundly transforming higher education, but its potential could only be realized through responsible adoption, robust ethical regulations, and sustained investment in human capacity. This review provided both theoretical and practical insights for educators, policymakers, and researchers to advance AI-driven digital transformation in higher education.

10:20-10:45
97442 | *Understanding University Students' GenAI Practices in Academic Writing: Insights for Teachers in Higher Education*
Kevin Yung, The Education University of Hong Kong, Hong Kong
Eric Kong, The Education University of Hong Kong, Hong Kong

This study examines how university students currently use Generative Artificial Intelligence (GenAI) tools in academic writing, providing crucial insights for educators seeking to understand and guide student practices. Through a comprehensive mixed-methods investigation involving 329 students from seven universities across Hong Kong and Mainland China, we explored students' GenAI usage patterns, perceptions, and awareness of tool limitations. Our findings reveal that students predominantly employ GenAI for brainstorming ideas, generating essay outlines, and grammar checking, while showing limited engagement with academic reading applications. Students demonstrate generally high awareness of human responsibility when collaborating with GenAI and recognize most limitations, though their understanding of GenAI bias remains comparatively lower. Notably, students report medium confidence levels in academic writing and express concerns about over-reliance on GenAI tools. These insights illuminate critical gaps between student practices and optimal GenAI integration. Students' heavy reliance on basic GenAI functions while underutilizing advanced academic features suggests a need for targeted educational intervention. The study highlights the importance of addressing students' writing confidence alongside GenAI literacy, as diminished confidence may paradoxically increase dependence on AI assistance. For educators, these findings underscore the necessity of explicit instruction in critical evaluation of GenAI outputs and strategic integration of AI tools to enhance rather than replace human thinking.

09:30-11:10 | Room 604 (6F)

Wednesday Onsite Parallel Session 1

ACE2025 | Higher Education

Session Chair: Chona Ryan

10:45-11:10

97448 | *Values-Based Pedagogy in the Age of AI: Integrating Kindness and Educability in Higher Education*

Zixiu Guo, UNSW Sydney, Australia
Michael Cahalane, UNSW Sydney, Australia
Sam Kirshner, UNSW Sydney, Australia
Sandeep Mysore Seshadrinath, UNSW Sydney, Australia
Chona Ryan, UNSW Sydney, Australia
Carmen Leong, UNSW Sydney, Australia

Amid accelerating advancements in Artificial Intelligence (AI), higher education is undergoing critical reflection on its mission and ethical responsibilities. While AI offers personalisation, automation, and efficiency, it also raises concerns about human judgment, responsibility, and the erosion of critical thinking and agency, particularly when implemented without pedagogical care. This paper explores how a Pedagogy of Kindness, centred on relational care, mutual respect, and student dignity, can inform higher education's role in an AI-mediated future. It also examines the concept of Educability, defined as the human capacity to learn, unlearn, adapt, and act responsibly, as a complementary foundation for shaping ethically grounded and adaptable graduates. Educability distinguishes itself from static skill-based models by emphasising ethical adaptation and lifelong learning. Together, these concepts offer a holistic foundation for cultivating the ethical grounding and adaptive capacity students need to navigate uncertainty. We present a design-based research (DBR) study that restructured a Business School Information Systems capstone course to embed these principles. This study is among the first to operationalise kindness and educability as core design elements within an AI-facing curriculum. Through iterative design, implementation, and reflection, educators reported renewed professional purpose, while students described learning experiences that extended beyond technical skills to include competency building, ethical awareness and responsible action. Our findings contribute to values-based education discourse and offer actionable insights for educators, curriculum designers, and academic leaders seeking to reimagine learning in a rapidly evolving technological and ethical landscape.

09:30-11:10 | Room 605 (6F)
Wednesday Onsite Parallel Session 1
ACE2025 | Educational Policy, Leadership, Management and Administration
Session Chair: Elizabeth Pambuena

09:30-09:55
97176 | *Examining Resilience and Adversity Quotient of Filipino Teachers in Broward Country, FL, USA*
Nerrie Malaluan, Batangas State University, Philippines
Jonathan Adao, Lauderdale Lakes Middle School, United States

This study focused on developing a management program to support Filipino exchange teachers in the United States, particularly in Broward County Public Schools. It aimed to describe relevant profile variables of Filipino teachers, determine the extent of their resilience and level of adversity quotient (AQ), and examine the variations in these variables when grouped by demographic factors. The study also explored the key issues and challenges encountered by these educators. A descriptive research design was employed, utilizing a survey questionnaire as the primary data-gathering tool, supplemented by interviews and focus group discussions with 153 Filipino teachers. Data were analyzed using weighted mean, standard deviation, t-test, ANOVA, and Pearson-r correlation. Findings indicated that Filipino teachers exhibited high levels of resilience across emotional, social, professional, and motivational domains. In contrast, their AQ was generally average, particularly in control and endurance, while ownership and reach dimensions were below average. Statistically significant differences were found in the reach component of AQ when teachers were grouped by sex, and in the ownership and reach components based on teaching experience in the U.S. Common challenges identified included classroom management, cultural adjustments, limited parental involvement, and difficulties in instruction and scheduling. These insights informed the development of a management program aimed at strengthening the resilience and adversity quotient of Filipino teachers. The proposed program seeks to enhance their adaptive capacities and support their effectiveness in navigating the complexities of teaching in a cross-cultural environment.

09:55-10:20
96577 | *Confucian Queer Agency: Conceptualising the Mechanisms of LGBTQ Teachers' Resistance in Chinese Schools*
Weiyuan Wu, The University of Manchester, United Kingdom

This paper engages with Judith Butler's theorisation of gender performativity and seeks to expand understandings of agency in queer theory by conceptualising the mechanisms of resistance in practice, using the case of Chinese schooling as its focus. Drawing on the Confucian dual concepts of ming (name) and shi (actuality), alongside empirical interview data from 25 LGBTQ schoolteachers, I rethink queer agency as the tactical reworking of the performative (re)citations between naming and being. I identify three distinct mechanisms: 1) practising reinterpretation in a nameless way; 2) separating actuality from the inhabiting name; 3) introducing a new name alongside a corresponding actuality. Together, these mechanisms constitute what I neologise as Confucian queer agency – a conceptual framework that captures and clarifies how individuals navigate their sexualities while resisting heteronormativity within complex sociocultural and institutional constraints. This paper makes three key contributions. Epistemologically, it brings Confucianism – an ancient philosophy concerned with the way of life – into conversation with queer theory, which is grounded in postmodern and social-constructionist traditions. While Confucianism does not articulate ontology or epistemology in Western terms, its ethical and relational worldview interrogates Western paradigms and demonstrates the potential of non-Western philosophies to enrich theorising on queer life. Conceptually, it advances understandings of queer agency by theorising the specific mechanisms through which resistance becomes possible under normative regulation. Empirically, it sheds light on how gender and sexual norms are navigated, reworked, and resisted in Chinese schools, offering implications for mobilising queer resistance in China and other contexts.

10:20-10:45
96611 | *How Does School Leader's Authentic Leadership Influence Teachers' Proactive Behavior? The Mediating Roles of Value Congruence and Duty Orientation*
Giang Hoang, RMIT University, Vietnam
Nhu Do, RMIT University, Vietnam
Lam Bui, Hanoi National University of Education, Vietnam

In the rapidly evolving landscape of education, teachers' proactive behavior is essential for creating an effective learning environment for students. Despite its significance, research on the factors influencing teachers' proactive behavior remains limited. This study addresses this gap by examining the impact of principals' authentic leadership on teachers' proactive behavior, with a focus on the mediating roles of perceived value congruence and duty orientation within the framework of social cognitive theory. Data were collected from 752 early childhood teachers across 155 kindergartens in Vietnam and were analyzed using structural equation modeling. The findings indicate that principals' authentic leadership significantly enhances teachers' proactive behavior, underscoring the critical role of this leadership style in educational settings. Additionally, the study confirms that both perceived value congruence and duty orientation are vital mediators in this relationship. When teachers perceive alignment between their values and those of their leaders, and feel a strong sense of duty, they are more likely to engage in proactive behaviors. This research contributes to the existing literature by addressing gaps related to the influence of leadership styles on teacher behavior, particularly in early childhood education. It highlights the necessity of cultivating authentic leadership practices among school principals to foster a proactive teaching environment. The implications for practice are substantial, offering actionable insights for educational leaders seeking to enhance teacher engagement and effectiveness.

10:45-11:10
100299 | *The Lived Experiences of Faculty with External vs External Locus of Control and Their Organizational Commitment*
Elizabeth Pambuena, Polytechnic University of the Philippines, Philippines

Organizational commitment among faculty members remains a critical determinant of institutional effectiveness, academic excellence, and overall employee well-being in higher education settings. This qualitative phenomenological study employed semi-structured interviews with a purposive sample of PUP faculty. The interview protocol explored participants' experiences related to their locus of control (internal vs. external) and its impact on their organizational commitment. Analysis revealed ten key themes clustered into textural (descriptive) and structural (explanatory) categories. Textural themes included a strong sense of control and autonomy in the classroom, deep commitment to the institution driven by purpose and collegiality, perceived essential institutional support (though areas for improvement were noted), and effective communication and leadership. Structural themes emphasized individual agency and resilience, as well as influences that shape commitment and responsibility, institutional support and structural alignment, and interpersonal dynamics and communication. The findings highlights how faculty commitment and engagement arise from a dynamic interaction between their sense of personal control and the organizational environment. Faculty demonstrate strong autonomy and dedication, supported by clear roles, effective leadership, and collaborative communication. Despite systemic challenges like resource constraints and workload pressures, faculty show resilience and adaptability, emphasizing the need for institutional support aligned with their motivations. Sustaining organizational commitment requires integrating individual agency with responsive structures, fostering a supportive culture that promotes well-being, collaboration, and academic excellence in a changing educational landscape. Future directions include providing adequate resources and staff, clarifying roles, improving communication, promoting participation, and offering professional development. Future research should investigate the generalizability of these.

09:30-11:10 | Room 607 (6F)
Wednesday Onsite Parallel Session 1
ACE2025 | Education, Sustainability and Society
Session Chair: Jen-Hao Chen

09:30-09:55
No presentation

09:55-10:20
101162 | *Educational Participation: Determinants of School Continuation Among Children at Risk of Dropping Out*
Santoso Santoso, Article 33 Indonesia, Indonesia
Yusuf Faisal Martak, Article 33 Indonesia, Indonesia

Indonesia introduced the Nine-Year Compulsory Education policy in 1984 and expanded it to Thirteen Years in early 2025. Despite these efforts, school participation remains suboptimal, especially at the secondary level. Around four million children are out of school due to individual, social, cultural, and structural factors. This study examines both the risks of dropout and the enabling factors that increase the likelihood of continued participation among at-risk children. Using data from the 2021 and 2024 Indonesian National Socio-Economic Surveys, the analysis applies descriptive statistics and logistic regression to 277,304 individuals aged 5–18 years. The results show that: (1) the main reasons for leaving school are child labor, early marriage, and the perception of having attained sufficient education; (2) frequent gadget use and larger household size significantly raise the probability of dropout; (3) conversely, children from wealthier households, those whose household heads have at least senior high education, those with access to financial services, those with early childhood education, and female students are more likely to remain in school; and (4) among at-risk children, the education level of the household head and access to financial services are decisive in preventing dropout. The study recommends: (1) government interventions to secure education access for children in diverse circumstances, including those engaged in work or early marriage; (2) policies to regulate children's use of digital devices to mitigate dropout; and (3) stronger efforts to promote awareness of education's lifelong value, particularly among parents, as parental education strongly influences children's schooling outcomes.

10:20-10:45
96373 | *Autoethnography as Story: The Realities and Dynamics of Transnational Children's Education on the Indonesia-Malaysia Border*
Jagad Aditya Dewantara, Universitas Tanjungpura, Indonesia
Dasim Budimansyah, Universitas Pendidikan Indonesia, Indonesia
Kokom Komalasari, Universitas Pendidikan Indonesia, Indonesia
Gida Kadarisma, IKIP Siliwangi, Indonesia
Cecep Darmawan, Universitas Pendidikan Indonesia, Indonesia

This study examines the dynamics of transnational children's education on the Indonesia-Malaysia border, specifically in the Dayak Bidayuh community between Kampung Sontas (Indonesia) and Entubuh (Malaysia). The main issue is how citizenship status, limited mobility, and state policies affect children's access and educational experiences in cross-border kinship networks. The study aims to uncover the complex realities of these children's education from the perspective of actors directly involved in border life. Using an autoethnographic method implemented over five years (2019–2024), researchers immersed themselves in the lives of border communities, conducting participant observation, in-depth interviews, and documenting personal experiences as the main narrative. The results of the study show that transnational children face administrative limitations, gaps in educational facilities, and pressures of national and ethnic identity. Nevertheless, families and local communities play a central role in maintaining educational values through adaptive strategies and kinship solidarity. The implications of this study indicate the importance of inclusive and cross-border education policies and the need for state recognition of the complexity of identity and mobility of border communities. Autoethnography as an approach can bridge personal experiences with the structural dynamics that influence the lives of transnational children.

10:45-11:10
98179 | *Microaggressions in Higher Education Settings and Urban Indigenous Students' Dropout Intention in Taiwan*
Wei-Lin Chen, National Sun Yat-sen University, Taiwan
Jen-Hao Chen, National Chengchi University, Taiwan
Cheng-Shi Shiu, National Taiwan University, Taiwan

Understanding the association between microaggressions in higher education and Indigenous students' dropout intention is essential for addressing persistent educational disparities between Indigenous populations and the majority. This study identified two key aspects of microaggressions: systemic exclusion and attacks, and anti-Indigenous pedagogical practices, and explored factors associated with these microaggressions and their relationship with dropout intention. Data were collected through a structured online survey administered from April to November 2024 in Taiwan. The analysis included 326 Indigenous adults with tertiary education degrees. Ordinary least squares regressions revealed that Amis participants reported fewer microaggressions compared to other Indigenous groups, whereas Bunun and Paiwan participants reported higher levels of microaggressions. Participants aged 30 and older reported fewer experiences of systemic exclusion and attacks. Gender differences emerged, with female participants reporting greater awareness of systemic exclusion and attacks, and male participants showing higher sensitivity to anti-Indigenous pedagogical practices. Crucially, anti-Indigenous pedagogical practices were positively associated with dropout intentions, while systemic exclusion and attacks were not significantly related. These findings highlight distinct aspects of microaggressions associated with Indigenous students' educational persistence, emphasizing the importance of tailored justice interventions to reduce disparities and support Indigenous students in higher education.

09:30-11:10 | Room 608 (6F)
Wednesday Onsite Parallel Session 1
ACE2025 | Educational Policy, Curriculum Design and Development
Session Chair: Maria Lourdes Cervantes

09:30-09:55
97906 | *English Language Proficiency as Predictor of Academic Achievement in Science and Mathematics*
Milagros Valerio, Don Bosco Technical Institute Makati, Philippines
Charo Mae Lampad, Don Bosco Technical Institute Makati, Philippines

The students' poor performance in Science and Mathematics is often linked to the poor language proficiency of students, particularly, reading comprehension. This study is anchored on basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) as theorized by Cummins (1984, 2000). This study used the predictive correlational design to determine the specific language component and cognitive skills that contribute to the students' performance in Science and Mathematics. This study involved 125 randomly chosen students who took the CEM Post-test. Data revealed that out of the six language components, Application, Analysis, Evaluation are significant predictors of students' over-all performance in Mathematics. Though the language components do not affect the over-all performance in Science, there are certain cognitive skills in Science where language components are found to be contributory. Application, Analysis, and Evaluation, as cognitive skills in English contribute to the development of the Application skill in Science; Analysis and Evaluation skills in English contribute to the development of the Evaluation skill in Science. It was also found in the study that in Mathematics, Grammar and Reading are not helpful in the students' performance. Furthermore, Reading and Understanding as cognitive skills in English do not affect any sub-skills in Science. Improving the students' performance in Science and Mathematics requires the development of their cognitive (higher order thinking) skills in English language. Thus, the following recommendations for language teachers were given: a) implement the use of text across disciplines in active reading activities and assessments; b) provide activities which focus on enhancing and assessing the students'cognitive academic language proficiency.

09:55-10:20
96434 | *School Quality Life: A Year-Round Educational Model for Innovation and Inclusion*
Marco Brevi, Independent Researcher, Italy

In the context of smart cities—where innovation, sustainability, and well-being converge—we propose a year-round compulsory school that transcends traditional structures. Our vision eliminates classrooms, rigid age groupings, and punitive grading, fostering a living, modular environment rooted in freedom and personal development. The school operates continuously for 52 weeks, with rotational rest weeks replacing long summer breaks, ensuring seamless engagement. Learning occurs in dynamic "islands", while corridors are transformed into active educational oases. Students, grouped by developmental stages (2–6, 6–12, and 12–16 years), explore cultural and educational themes freely within a single, inclusive campus. Grades are replaced by participation points, earned through voluntary engagement in quizzes, activities, and group challenges. Self-assessment is central: a dedicated room lets students choose to test individually (maximum points) or collaboratively (fewer points, but fostering cooperation). Instead of traditional teachers, three guides support each group of ~40 students, nurturing growth and discovery. Freedom of movement is integral—students may sit, stand, lie down, or move as they learn. This approach aligns with the principles of smart cities: adaptable, modular spaces; technology-enhanced learning; emotional well-being; and open community integration. Our model is not just a school—it is a living, breathing space for continuous learning and cultural evolution.

10:20-10:45
95919 | *The Holistic Student Experience: Understanding the Multifaceted Factors Influencing College Student Success*
Blenn Nimer, Notre Dame of Kidapawan College, Philippines
Klemm Ryan Bernabe, Notre Dame of Kidapawan College, Philippines
Daisy Labadia, Notre Dame of Kidapawan College, Philippines
Gil Henry Aballe, Notre Dame of Kidapawan College, Philippines

The traditional approach to student success often centres on academic achievement, typically measured by Grade Point Average (GPA). However, this narrow perspective neglects the various challenges students face, impacting their overall well-being and ability to thrive. This study employed a convergent mixed methods design to investigate the experiences of college students at a higher education institution in the Philippines. Quantitative data were collected through a structured survey, while qualitative insights were garnered from open-ended essay responses using a universal sampling technique. A research instrument was developed to assess students' experiences concerning academic and social adjustment, emotional well-being, financial challenges, faculty support, and available resources. After pilot testing, the final instrument featured 45 indicators with excellent reliability. Quantitative data were analysed using Exploratory Factor Analysis (EFA) and Principal Component Analysis (PCA) with Promax rotation to uncover underlying factors. Simultaneously, qualitative data were examined through thematic analysis to identify key themes. The results from both datasets culminated in The Holistic Student Experience Framework, which illustrates the multifaceted factors influencing student success across six dimensions: academic, social, emotional, financial, institutional, and personal. This comprehensive framework emphasises the interconnectedness of these dimensions, advocating for a holistic view of the student experience. By understanding how these aspects interact, educational institutions can develop targeted strategies to enhance students' overall well-being and success.

10:45-11:10
96944 | *Admissions Profile as Predictors of Academic Performance in a New Medical School*
Maria Lourdes Cervantes, La Consolacion University Philippines, Philippines
Ma. Cristina Zulueta, La Consolacion University Philippines, Philippines

Higher Education Institutions (HEIs) in the Philippines are committed to deliver quality education and produce competent, highly efficient graduates equipped with values, skills, and knowledge ready to participate in the workforce. This research study determined the admission profiles of the first two group of graduates of the Doctor of Medicine Program of La Consolacion University Philippines, College of Medicine in Bulacan and correlated them to the graduates' over-all academic performance. The admissions' profile used were age at the time of admission, sex, collegiate course, general weighted average (GWA) from the collegiate course, National Medical Admissions Test (NMAT) percentile rank, work experience and licensure examination passed. These factors were used and correlated to the student's general weighted average (GWA) from the Doctor of Medicine Program from first to fourth year. In determining the relationship of variables of the admission criteria and the student's over-all performance and the significant predictor of students' success, regression analysis was utilized. The research study was subjected and adhered to the Research and Ethics Committee of the university. Regression analysis revealed that among the admissions' criteria, the students' General Weighted Average (GWA) from their collegiate course, licensure examination passed and National Medical Admissions Test (NMAT) percentile rank were associated with success in the program with a p value result of 0.004, 0.002 and 0.000 respectively. However, it can be concluded that NMAT percentile rank, based on obtained Beta coefficients, is the best predictor of success in the Doctor of Medicine program.

09:30-11:10 | Room 702 (7F)
Wednesday Onsite Parallel Session 1
ACE2025 | Education and Difference
Session Chair: Stefano Federici

09:30-09:55
101251 | *Enhancing Curriculum Planning and Student Academic Performance in Special Schools Through Learning Progression Framework (LPF)*
Shu Man Yau, Tung Wah Group of Hospitals Tsui Tsin Tong School, Hong Kong

This study examines the effectiveness of the Learning Progression Framework (LPF) in Hong Kong as an assessment tool for evaluating the academic performance of students with intellectual disabilities. The LPF enables teachers to better understand student performance and strategically enhance curriculum planning, teaching, and learning, thereby improving the learning-teaching-assessment cycle. Given that students with intellectual disabilities may struggle with written tests, formative assessments are typically employed to gauge their abilities. However, summative assessments pose challenges, including subjectivity and consistency in evaluation. Developed by the Education Bureau (EDB) in 2007, the LPF aligns with high school curricula for these students and provides a common assessment framework to facilitate learning progress and inform future learning objectives. Despite its long-term implementation, there has been limited research on the impact of LPF on student learning, particularly in optimizing curricula and addressing learning differences. This research involved 170 students with mild to moderate intellectual disabilities at TWGHs Tsui Tsin Tong School from 2021 to 2025. Results indicate significant improvements in students' academic performance following the implementation of LPF. Future studies could expand on these findings to explore how special schools can further enhance curriculum planning and academic outcomes through LPF. The findings contribute to a deeper understanding of how structured frameworks like LPF can facilitate better educational practices in special education, paving the way for improved academic achievements. This paper aims to provide valuable insights for educators, policymakers, and researchers interested in enhancing the educational landscape for students in special schools.

09:55-10:20
101269 | *No Child Left Undetected: Global Perspectives on Early Dyslexia Screening*
Nik Zatul-Iffah N Mohd Nabil, The National University of Malaysia, Malaysia
Mohd Effendi Ewan Mohd Matore, The National University of Malaysia, Malaysia
Mohd Syazwan Zainal, The National University of Malaysia, Malaysia

Dyslexia is a learning difficulty affecting 5 to 15 percent of children worldwide. Many cases remain undetected until later schooling, limiting achievement, lowering self-esteem and restricting future opportunities. This shows the need for early screening as a foundation for inclusive education. This study is based on a narrative literature review of international studies published in the past decade. The review explores global perspectives on early dyslexia screening by identifying trends, challenges and innovations across high resource and low resource contexts. Results reveal that advanced economies are adopting digital tools and artificial intelligence to improve efficiency and access. In contrast, low resource settings face barriers such as limited standardized instruments, lack of training and weak cultural adaptation. These disparities reinforce inequities that hinder progress toward Sustainable Development Goal 4 on inclusive and equitable education. Findings suggest that technology alone is insufficient. Effective screening requires balance between innovation and human intelligence, with teachers, parents and communities playing essential roles in interpretation and intervention. Early dyslexia detection should be recognized not only as an educational issue but also as a matter of dignity, equity and social justice. Strengthening screening practices can provide timely support, improve outcomes and reduce long-term effects of undetected learning difficulties. Future research should examine how technology, especially artificial intelligence, can be combined with culturally responsive approaches to design accurate and affordable tools. International collaboration is crucial to develop a global framework that reduces inequities and ensures every learner is identified early and supported effectively.

10:20-10:45
101180 | *Cascading Effects of Envelope Enhancement–Phonics Training on Auditory and Phonological Development in At-Risk Bilingual Preschoolers*
Mellisa Chin, Nanyang Technological University, Singapore
Thirishankari Aruthanan, Nanyang Technological University, Singapore
Beth Ann O'Brien, Nanyang Technological University, Singapore

Children with developmental dyslexia often exhibit phonological processing deficits that produce persistent reading difficulties. While phonics-based instruction supports early literacy, its impact is limited when auditory temporal processing deficits co-occur. In this talk, I will present my research on harnessing the potential of envelope enhancement—a signal-processing technique that amplifies speech onset cues—and explain its capacity to enhance neural entrainment to speech and downstream phonological development. My inquiry focuses on the impact of gamified envelope-enhanced auditory training when combined with phonics instruction on auditory and phonological skills in 53 Singaporean preschoolers at cognitive risk for developmental dyslexia across different intervention groups. Direct and cascading effects indicate that enhancing auditory processing establishes compensatory audio-cognitive pathways that mitigate phonological vulnerabilities, offering a novel mechanism to strengthen early literacy in at-risk bilingual learners. Finally, I will outline future directions, including using neuroimaging to map intervention-driven neuroplasticity, implementing adaptive and personalised interventions, and conducting large-scale, diverse trials to ensure generalisability, translational relevance, and sustained literacy gains.

10:45-11:10
101524 | *Generative AI for Inclusive Education: Creating Alternative Materials for Learning Disabilities*
Stefano Federici, University of Cagliari, Italy
Elisabetta Gola, University of Cagliari, Italy

University students with learning disabilities (LD) face significant challenges in coping with academic duties. These challenges are often worsened by insufficient or ineffective communication with their teachers. In this work we highlight the key issues related to their difficulties in engaging with learning materials, which largely stem from limited awareness among teachers about LD-specific learning needs, resulting in inadequate support. Although creating tailored materials for LD students is not inherently complex, when done manually, it requires teachers to dedicate considerable additional time and effort. In this talk we present an innovative strategy based on recent advances in generative AI. By learning from a small set of paired examples of standard and LD-adapted learning materials, generative AI can identify effective adaptation strategies. Once trained, the system can automatically produce LD-specific versions of new course materials directly from the standard versions provided by instructors. This approach reduces the workload for educators, who no longer need to manually produce separate versions, while ensuring that LD students receive learning resources suited to their needs. In this way, inclusive communication becomes central to the support system, and universities can, with limited additional effort, foster a culture of equity and understanding. This innovation enables students with learning disabilities to overcome barriers, succeed academically, and fully engage in their educational experiences.

09:30-11:10 | Room 703 (7F)
Wednesday Onsite Parallel Session 1
ACE2025 | Professional Training, Development and Concerns in Education
Session Chair: Izhar Oplatka

09:30-09:55
90781 | *Reframing the Workplace in a VUCA World: Teaching Assistants and Their Influence on Teachers' Efficiency and Self-Efficacy*
Bench Fabros, Central Luzon State University, Philippines
Joseph Villarama, Central Luzon State University, Philippines
Verjun Dilla, Central Luzon State University, Philippines
Melvin Valdez, Central Luzon State University, Philippines

The volatile, uncertain, complex, and ambiguous (VUCA) educational landscape demands educators to embrace innovative practices and cater to diverse student needs. This study explores the influence of teaching assistants (TAs) on teachers' efficiency and self-efficacy. A convergent mixed methods design was employed, with data collected from 100 teachers with TAs in the Philippines through surveys and interviews. The findings reveal that TAs significantly improve teachers' workplace efficiency and self-efficacy. Teachers value their TAs' ability to reduce workload, allowing them to better address student needs. However, challenges emerged regarding TAs' preparedness for abrupt academic changes. This study contributes to understanding the multifaceted dynamics between TAs and teachers. It suggests that well-trained TAs enhance teachers' efficiency and self-efficacy, potentially leading to improved educational outcomes. By enhancing the effectiveness of TAs, educational institutions empower teachers and contribute to a more resilient educational environment. Further research is recommended to explore the specific roles of TAs across disciplines and to optimize their support for teachers in a VUCA world.

09:55-10:20
97127 | *Exploring the Concept of Pedagogical Resilience During the COVID-19 Pandemic: Teachers' Perspectives from Thailand and the Philippines*
Celso Zara, Batangas State University, Philippines

This brief research report aimed to explore the concept of pedagogical resilience and how teachers in Thailand and the Philippines build resilience in pedagogy during the COVID-19 pandemic. Employing the qualitative research design, the data were obtained from the focus group discussion (FGD) and semi-structured interviews with 12 teachers, 8 of whom were from 1 of the universities in the Philippines and another four teachers from a university in Thailand. The thematic analysis revealed that pedagogical resilience is influenced by teachers' personal, professional, and social attitudes toward teaching and learning during the COVID-19 pandemic. Although teachers acknowledged that they had no experience in remote and online teaching, they demonstrated resiliency by being flexible and adaptive to the situation. Such an attitude allowed them to build a relationship with their colleagues and design teaching and learning pedagogy that addresses the issues in their online and remote teaching. The findings provide a clear understanding of the conceptualization of pedagogical resilience from the perspectives of teachers in the Philippines and Thailand.

10:20-10:45
96667 | *Emotional Management, Work Stress, and Psychological Capital in Elementary Teachers During the Pandemic*
Shu-Fang Kao, Soochow University, Taiwan
Tsou Mei Chen, Guangming Elementary School, Taiwan
Luo Lu, National Taiwan University, Taiwan

This study investigates the relationship between emotional management and work stress among elementary school teachers in Hsinchu County during the COVID-19 pandemic, with psychological capital as a moderating variable. The research is motivated by the significant increase in teachers' workload and stress due to pandemic-related changes, such as online teaching and enhanced health protocols. The study aims to understand the current status of teachers' emotional management, work stress, and psychological capital, explore the correlation between emotional management and work stress, and examine whether psychological capital moderates this relationship. Method The research employed a quantitative approach using a stratified sampling method to select elementary school teachers in Hsinchu County as participants. A total of 211 valid questionnaires were collected. The survey measured variables including emotional management, work stress (covering student behavior, workload, professional knowledge, and administrative support), and psychological capital. The results revealed that, under the impact of the pandemic, teachers generally exhibited good emotional management and psychological capital, but experienced the highest stress from increased workload. There was a significant negative correlation between emotional management and work stress, indicating that better emotional management was associated with lower work stress. Furthermore, psychological capital was found to moderate the relationship between emotional management and work stress, buffering the negative effects of stress when teachers had higher psychological capital. The findings highlight the importance of emotional management and psychological capital in reducing work stress among elementary school teachers during the pandemic. Effective emotional management can alleviate stress, and psychological capital serves as a protective factor, enhancing teachers' resilience to work-related challenges.

10:45-11:10
94766 | *Teacher Happiness in Preschool Education: Sources and Implications*
Izhar Oplatka, Tel Aviv University, Israel
Sivan Binyaminov Schlesinger, Tel Aviv University, Israel

Purpose. To explore the ways Israeli preschool teachers perceive happiness in their work, the major sources of their happiness, and its perceived impact. Background. Happiness is a state of well-being achieved through the realization of one's potential and the pursuit of a purposeful and virtuous life. It emphasizes personal growth, meaningful relationships, autonomy, environmental mastery, and the alignment of actions with one's values and inner potential. Method. The study was based on a qualitative paradigm which posits that social phenomena and a person's experiences are represented in a subjective, narrative-verbal way. A total of 14 interviews with preschool female teachers were conducted. Their ages ranged from 33 and 58 and their years in teaching were between 11 and 35. Potential interviewees were invited to complete a brief self-report measure of teachers' positive psychological functioning at work constructed and validated by Renshaw, Long and Cook (2015). Only teachers whose rank in this scale is over 4 (high) were selected. The interview transcripts were analyzed in accordance with Marshal and Rosmann (2011). Findings. Our interviewees subjectively defined happiness in their work in terms of high well-being, gratitude, and optimism and connected it to effective teaching. They emphasized the importance of self-fulfillment, positive relationships with supervisors, colleagues and parents, and students' successful development for their sense of happiness. Value. Exploring happiness among preschool teachers may expand our understanding of emotion in preschool education, in general, and of happiness, in particular, and connect happiness to the unique instructional and organizational contexts of preschool education.

09:30-11:10 | Room 704 (7F)
Wednesday Onsite Parallel Session 1
ACE2025 | Assessment Theories and Methodologies
Session Chair: Pei-Chun Lin

09:30-09:55
96135 | *Dialogic Feedback in the Spotlight: What Interventions Support Learning or Achievement?*
Jan-Sébastien Dion, Université de Sherbrooke, Canada
Jonathan Smith, Université de Sherbrooke, Canada

From primary to higher education, teacher feedback can be highly effective in fostering student motivation, self-regulation, learning, and achievement. However, these positive outcomes are not guaranteed and depend on how receptive students are to feedback. Such evidence underscores the necessity for teachers to know how to provide useful and insightful feedback and to be mindful of how students receive and understand it. In this regard, recent research shifted its focus towards dialogic feedback, considered a process rather than a product, in which the meaning of feedback is co-constructed with students and the necessary actions to successfully complete a task are discussed to optimize the students' response to it. Although an abundance of literature has now embraced this perspective, the characteristics of dialogic feedback that could support learning or achievement remain unclear. Therefore, we conducted a systematic scoping review of literature to identify and clarify dialogic feedback interventions used by teachers in various disciplines from primary to higher education and to summarize their effects on learning, achievement, and supporting outcomes such as motivation, self-regulation, and engagement. Interventions involving automatic, programmed, or peer feedback practices were not considered. The results indicate that dialogic feedback generally leads to positive outcomes, but the diversity of the interventions limits their comparability. Furthermore, the included studies reveal an overrepresentation of higher education settings and qualitative approaches in research, which influences the results. The main characteristics of the collected interventions will be described and discussed, and recommendations for teacher initial and continuous training will be offered.

09:55-10:20
98481 | *From Structure to Meaning: Validating Network Analysis for Identifying Scientific Concepts' Functional Roles Through Centrality Metrics*
Ekaterina Andronova, HSE University, Russia
Anastasiia Kapuza, HSE University, Russia

Understanding how students organise scientific concepts is central to educational research, as concept structures reflect both knowledge organisation and the development of expertise. Conceptual structures are commonly studied through systemic properties such as connectivity or hierarchy. Yet less attention is given to the functional roles of individual scientific concepts, partly due to challenges in defining measurable characteristics beyond counts or expert assessments. This pilot study examines whether network analysis (NA) centrality metrics can reflect the functional roles that scientific concepts play in structuring learners' conceptual systems. It was hypothesised that higher centrality values would correspond to structuring, linking, or centralising functions, while lower values would indicate peripheral roles. Six master's students with a homogeneous educational background constructed concept maps of statistical data analysis while verbalising their thought process. This produced six maps with 170 scientific concepts and corresponding think-aloud protocols. Centrality metrics (normalised betweenness, degree, Eigenvector, and PageRank) were calculated. Functional roles were identified inductively through directed content analysis, yielding categories such as structuring, linking, centralisation, and clarification. The results confirmed our hypothesis. Scientific concepts with higher centrality values, such as "analysis", "methods," "sample", and "models", were consistently marked as performing centralising, structuring, or linking roles. Concepts with lower centrality values more often served orienting or clarifying functions. Furthermore, highly abstract scientific concepts with high degree centrality frequently appeared in participants' explanations. These findings support network analysis as a methodological tool for exploring both the structural and functional dynamics of scientific concept systems in educational contexts.

10:20-10:45
97507 | *Improving Teachers' Assessment Literacy Using AI-powered Assessment Feedback in Mathematics*
Alvin Barcelona, Philippine Normal University-Manila, Philippines
Christine Joy David, Bina Bangsa School, Indonesia
Roxan Villanueva, Bina Bangsa School, Indonesia

Improving teachers' assessment literacy is critical to enhancing the quality of mathematics education, as effective assessment practices directly impact student learning outcomes. This case study investigated the potential of AI-powered assessment feedback to improve mathematics teachers' assessment literacy. The study, which involved 15 mathematics teachers from the Philippines, found that AI-generated feedback helped teachers develop a deeper understanding of student progress, identify learning gaps, and adjust instructional strategies more effectively. Additionally, AI tools were shown to foster self-regulation in both teachers and students, as teachers reflected on their practices and adjusted them based on AI insights. This led to more targeted and efficient interventions. Furthermore, the research highlighted the challenges teachers face in adopting AI-powered tools, such as issues with technology readiness, the need for professional development, and concerns about data privacy. Despite these challenges, teachers reported increased confidence in their assessment practices and a better understanding of student needs, allowing for a more tailored approach to teaching. This study underscores the value of AI in empowering teachers to enhance their assessment literacy, thereby improving both the quality of teaching and learning outcomes in mathematics. The findings provide practical recommendations for integrating AI tools into professional development programs for mathematics educators, aiming to bridge the gap between traditional assessment methods and innovative, data-driven practices.

10:45-11:10
101170 | *Efficient Assessment Questions for Evaluating Managerial Mathematics Achievement to Enhance Learning Effectiveness*
Pei-Chun Lin, National Cheng Kung University, Taiwan
Jenhung Wang, National Kaohsiung University of Science and Technology, Taiwan

This study explores the design and application of high-quality test items to evaluate student learning achievement in the required sophomore course Managerial Mathematics in the College of Management. The project aims to improve teaching quality and learning effectiveness by developing assignments and tests through an online platform and analyzing results to identify conceptual errors and their causes. The Rasch model was employed, emphasizing two core factors: student ability, where higher values indicate stronger competence, and item difficulty, where higher values represent more challenging items. By modeling students' responses, the Rasch framework provides interval-level and objective measurement, thereby supporting more rigorous item analysis. An experimental design was adopted to compare testing formats (online vs. paper-based), scoring methods (binary vs. partial credit), and time constraints. In addition to dichotomous scoring for multiple-choice questions, partial credit was introduced to capture student performance more precisely. Independent variables included assessment mode, time limitation, and test format. Four hypotheses were tested. Results showed that performance differed significantly between online and paper-based tests (rejecting H1). Evidence was insufficient to support H2, suggesting that partial credit did not significantly reduce undesirable responses. H3 was also not rejected, indicating no conclusive effect of test format on different item types. H4 was rejected, demonstrating that time constraints significantly influenced performance. Overall, the findings highlight the value of Rasch-based item analysis in evaluating learning achievement and provide practical implications for enhancing the teaching of Managerial Mathematics.

09:30-11:10 | Room 705 (7F)
Wednesday Onsite Parallel Session 1
ACE2025 | Art and Design in Education
Session Chair: Po Yuan Su

09:30-09:55
101200 | *Apron Design Factors for Enhancing Workshop Learning in Design Schools*
Meng Zeng, Tatung University, Taiwan
Li-Chieh Chen, Tatung University, Taiwan
Po-Ying Chu, Tatung University, Taiwan

In design education, workshops are central to experiential learning, yet aprons are still regarded primarily as protective gear rather than as tools that support learning. This study examines how apron design can enhance workshop experiences by addressing students' practical needs, comfort, and identity expression. Using a mixed-method approach that combined questionnaires and field observations, the research identified major shortcomings in current institutional aprons, including poor fit, limited functionality, and lack of aesthetic appeal. In response, a modular and gender-neutral design strategy is proposed, with five interrelated dimensions: safety and protection (durable, replaceable coverage), functionality and utility (modular storage and mobility), ergonomics and comfort (adjustable and breathable structures), cognitive and learning support (visual cues and instructional integration), and identity and motivation (personalization and professional simulation). The survey sample, balanced across female and male students, further underscores the importance of inclusive and gender-neutral styling, as students expressed strong support for designs that accommodate diverse body types and challenge traditional gender distinctions. For Generation Z learners, opportunities for personalization and aesthetic appeal also emerged as central to motivation and usability. The study argues that a well-designed apron is not merely clothing but a pedagogical interface that supports efficiency, organization, and engagement. By reframing aprons as educational tools, the research emphasizes their potential to foster diversity, self-expression, and inclusive values in design education, offering practical strategies for safer, more engaging, and motivational workshop learning environments.

09:55-10:20
96933 | *Outcome-Based Education in ASEAN Design Education Programs: Implementation, Practices, and Challenges*
Nimit Mengveha, King Mongkut's University of Technology Thonburi, Thailand
Pronyos Chattarakul, King Mongkut's University of Technology Thonburi, Thailand
Pattarapol Chantkam, King Mongkut's University of Technology Thonburi, Thailand
Pote Nilsa-ard, King Mongkut's University of Technology Thonburi, Thailand
Woranooch Chuenruedeemol, King Mongkut's University of Technology Thonburi, Thailand
Bettiza Escueta, King Mongkut's University of Technology Thonburi, Thailand

Outcome-Based Education (OBE) is increasingly pivotal in shaping ASEAN higher education, particularly within design-related programs. This article critically examines the extent of OBE implementation across ASEAN institutions, highlighting notable practices, significant challenges, and innovative strategies. The study identifies diverse approaches utilized across Indonesia, Malaysia, the Philippines, and Vietnam, emphasizing how national policies and frameworks such as the ASEAN University Network Quality Assurance (AUN-QA) guide the integration of clearly defined learning outcomes. A case study of the Design Innovation Program - School of Architecture and Design, King Mongkut's University of Technology Thonburi (KMUTT) provides deeper insights, specifically exploring the collaborative development of program learning outcomes, teaching and learning strategies, and assessment methods in partnership with industry leaders like Jacob Jensen Design and 4digit Thailand. This industry-academic collaboration showcases both the complexity and potential of co-created educational frameworks in enhancing practical skills, professional readiness, and outcome alignment. Despite notable logistical, pedagogical, and communication challenges, the structured approach significantly contributes to improved student competencies and satisfaction. Continuous improvement efforts underscore the importance of sustained collaboration and structured feedback mechanisms in refining OBE implementation. This analysis contributes valuable perspectives to ongoing discussions on effective educational strategies, offering practical recommendations for optimizing outcome-based frameworks within ASEAN's diverse educational contexts.

10:20-10:45
97110 | *Learning Experiences and Creativity with Gen-AI in Media Design Education*
Yuet Kai Chan, The Hong Kong Polytechnic University, Hong Kong
Henry Ma, The Hong Kong Polytechnic University, Hong Kong
Jae-Eun Oh, The Hong Kong Polytechnic University, Hong Kong
Step Cheung, The Hong Kong Polytechnic University, Hong Kong
Tsz Ning Tsang, The Hong Kong Polytechnic University, Hong Kong

Visualization is one of the major developing parts of the generative artificial intelligence (Gen-AI) era. Equipping students to effectively use Gen-AI tools in their creative processes is the vital action that Media design education should acknowledge. However, there are limited studies on integrating Gen-AI into design curricula. This research aims to assess Gen-AI's impact on the student's perception, creativity, and efficiency in media design, which allows students to have better control of how AI could help in their projects and creations by having access to practical experiences with AI software and tools. Action research was conducted in the media design programme for two semesters by integrating Gen-AI elements into video production and animation subjects. Qualitative research data is collected to capture participant experiences and feedback. Surveys provide quantifiable data on participant perceptions, attitudes, and satisfaction levels. Observations made throughout workshops and class sessions show the application and efficacy of Gen-AI in teaching and learning. Focus group interviews reveal participants' suggestions, difficulties, and experiences. Thematic analysis and statistical methods are applied for the data analysis. Findings reveal that students welcome the advanced technology and are willing to adapt to it. However, there are still some hesitations, such as ethical concerns and unstable quality, that may affect their willingness to adopt AI in students' creative processes. The results suggested the direction of scaffolding AI tools in design education.

09:30-11:10 | Room 705 (7F)

Wednesday Onsite Parallel Session 1

ACE2025 | Art and Design in Education

Session Chair: Po Yuan Su

10:45-11:10

101322 | *Generative AI for Supporting Digital Media Design Teaching: Study on Game Design Applications*

Po-Yuan Su, Shu-Te University, Taiwan

This study investigates the integration of generative AI tools into digital media design teaching, focusing on multimedia game design applications. Specifically, the research explores the use of Moonland.ai as an AI-assisted platform to support students in ideation, 3D model creation, and game concept design. A combination of experimental teaching, case studies, and survey-based evaluation is employed to examine how students utilize AI tools in their design process and how these tools affect creativity, efficiency, and learning engagement. Preliminary findings suggest that the AI-assisted approach enables students to generate design ideas more quickly, enhances creative thinking, and facilitates problem-solving in game design tasks. Additionally, students reported that the AI tools provide valuable support for iterative design and visual experimentation. This study aims to develop a practical framework for effectively incorporating generative AI into digital media design teaching, offering insights for educators seeking to enhance student learning experiences and for future research on AI-assisted creative pedagogy.

09:30-11:10 | Room 707 (7F)
Wednesday Onsite Parallel Session 1
ACE2025 | AI in Education
Session Chair: Ricio Salibay

09:30-09:55
101349 | *The Impact of University Students' Experiences with ChatGPT on Social-Emotional Competence: A Grounded Theory Approach*
Su-min Lee, Pusan National University, South Korea
Hye-ran Lee, Pusan National University, South Korea
Sang-soo Lee, Pusan National University, South Korea

University students today face challenges not only in achieving academic success but also in maintaining emotional well-being and developing social relationships. Recently, generative artificial intelligence, particularly ChatGPT, has gained wide attention as it functions not only as a learning assistant but also as a tool for emotional support and self-reflection. The purpose of this study was to explore the impact of university students' experiences with ChatGPT on their social-emotional competence (SEC). Employing a grounded theory approach, data were collected from 15 students who had experience using ChatGPT through essay-type questionnaires, followed by in-depth interviews with an additional 5 participants. The data were analyzed through open coding, axial coding, and selective coding. The findings revealed four key categories: "emotional support and stability", "self-reflection and emotional expression", "enhancement of learning efficacy", and "improvement of communication and relational skills". Through interactions with ChatGPT, students reported strengthened self-awareness and self-regulation, greater empathy and understanding of others, and the indirect acquisition of relational skills. These findings suggest that ChatGPT functions as more than a learning tool, serving as a positive medium that fosters the development of social-emotional competence. Based on Social Presence Theory and Self-Determination Theory, ChatGPT can be understood as a companion-like presence that fulfills learners' psychological needs for autonomy, competence, and relatedness, thereby supporting social-emotional growth. This study highlights the potential of incorporating generative AI such as ChatGPT into higher education as a means of fostering students' social-emotional competence.

09:55-10:20
101299 | *University Students' Trust and Understanding of AI: Development, Validation, and Standardized Scoring of a Multidimensional Scale*
Qianhui Shen, The Hong Kong Polytechnic University, China
Chi Fai Henry Ma, The Hong Kong Polytechnic University, China

The integration of artificial intelligence in education (AIED) is gaining popularity due to its potential to provide customized learning experiences and just-in-time learning, particularly benefiting higher education students. However, research indicates that the effectiveness of AIED is influenced by students' trust in AI and their understanding of it. Thus, exploring the relationship between students' trust and their comprehension of AI is essential for the successful implementation of AIED. This study conducted a systematic review of the literature to develop the University Students' AI Trust and Understanding Relationship Scale. An Exploratory Factor Analysis (EFA) was performed to identify a 10-factor model of the psychometric scale (n = 102), including dimensions of trust (such as capability, benevolence, integrity, and transparency), understanding (technical and societal/ethical), trust dynamics (elasticity and ethical alignment), and interactions between trust and understanding. The analysis demonstrated strong internal consistency (Cronbach's α = .806–.890) and convergent validity. Following this, a Confirmatory Factor Analysis (CFA) was conducted to test the proposed factor structure (n = 340), indicating a good model fit (e.g., $\chi 2/df = 1.386$, CFI = 0.971, TLI = 0.967, RMSEA = 0.034, SRMR = 0.033). A standardized scoring system was developed, providing five interpretable levels ranging from Very Low to Very High, facilitating evaluations of students' trust and literacy regarding AI. The findings highlight the interconnectedness of trust and understanding of AI in fostering students' AI literacy in educational contexts. This research informs strategies for the effective, equitable, and sustainable adoption of AI in higher education.

10:20-10:45
97129 | *The Use of ChatGPT as a Supplementary Tool for Self-Directed Learning in Kinematics*
Norrie Gayeta, Batangas State University, Philippines
Peter Tee Jay Alvarez, University of the Philippines Los Banos, Philippines

This study aimed to explore how the Grade 9 students use ChatGPT as a supplementary tool for self-directed learning in kinematics. A purposive sample of twenty-eight (28) Grade 9 students from the Philippine Science High School – CALABARZON Region Campus participated in the study. The researcher used a validated questionnaire, documentary analysis and interview in gathering the data. The study covered various aspects such as the description of the characteristics of the students in terms of self-efficacy, self-regulation, and digital literacy, alongside the usage of ChatGPT to support self-directed learning in kinematics including learning satisfaction, clarifying doubts, and frequency of interaction. It also covered the relationship of the characteristics of students and usage of ChatGPT and the implications of using the software as supplementary tool in self-directed learning in kinematics. Implications of using ChatGPT as supplementary tool in self-directed learning were identified by an in-depth interview among physics teacher, head of the research unit, and chief of the curriculum and instruction. Results indicated that Grade 9 students were generally self-regulated and self-efficacious. Questionnaire results revealed that they have exhibited behaviors conducive to learning kinematics such as planning ahead of time and being goal-oriented. However only 14 out of 28 participating students demonstrated proficiency in chatbot literacy, this result was attributed to poorly constructed prompts which was also evident in the document analysis. Among the variables examined: self-efficacy, self-regulation, and digital literacy, only self-efficacy showed a significant and strong correlation with the usage of ChatGPT in terms of learning satisfaction, clarifying doubts, and frequency of interaction. Additionally, through in-depth interviews with physics teachers, head of the research unit, and curriculum and instruction chief, skill erosion emerged as a prominent theme concerning the implications of ChatGPT usage.

09:30-11:10 | Room 707 (7F)

Wednesday Onsite Parallel Session 1

ACE2025 | AI in Education

Session Chair: Ricio Salibay

10:45-11:10

94811 | *A Phenomenological Study on ChatGPT's Educational and Emotional Impact on Fluid Mechanics Learners in the Philippines: Testimonies from AI Devotees*

Ricio Milo Salibay, Cebu Technological University, Philippines

This study dispels doubts about ChatGPT's essential role as both a reliable academic partner and an empathic emotional guardian, drawing from the testimonies of self-confessed AI devotees in the Philippines. Using a transcendental phenomenological research design, the study explored the lived experiences of twelve fluid mechanics education students who extensively engaged with ChatGPT in their academic and personal lives. Data collection included in-depth interviews, observations, journal analysis, peer consultations, and focus group discussions. Findings revealed six key themes. First, "ChatGPT Is an Excellent Tutor," offering accessible, tailored explanations that facilitate deep learning. Second, "ChatGPT Is a Tireless Pastor," providing guidance and encouragement without bias or exhaustion. Third, "ChatGPT Is a Loyal Partner," ensuring unwavering availability and responsiveness. Fourth, "ChatGPT Is an Emotional Protector," fostering resilience by listening and offering nonjudgmental affirmation. Fifth, "ChatGPT Is an Unjudging Brother," allowing free expression without fear of condemnation. Finally, "ChatGPT Is an Unassuming Advisor," delivering neutral, insightful guidance. However, participants acknowledged ChatGPT's limitations, including difficulty interpreting vague questions, low accuracy in simple calculations, occasional spelling errors, and its varying capacity for emotional engagement. Some found it empathetic, while others perceived it as detached. Ultimately, the study confirms ChatGPT's dual function as an academic enabler and emotional support system, proving its transformative role in cognitive and affective domains. This research contributes to the discourse on AI in education and human interaction, legitimizing ChatGPT as an indispensable tool despite its limitations.

09:30-11:10 | Room 708 (7F)
Wednesday Onsite Parallel Session 1
ACE2025 | Foreign Languages Education and Applied Linguistics
Session Chair: Steve Agnew

09:30-09:55
100919 | *Teaching in Between: Negotiating Bilingual Policy and English Pedagogy in Taiwan*
Hsin-Chi Huang, University of Bristol, United Kingdom

This reflective study explores the lived experiences of the researcher as an English teacher navigating Taiwan's English and bilingual education reforms over a ten-year period (2015–2025). Drawing from classroom practice in public schools, private institutions, and community education settings, it examines how top-down bilingual policies are interpreted, adapted, and sometimes resisted in local English teaching contexts. Based on reflective journals, student feedback, and lesson materials, the study highlights key tensions between policy goals and classroom realities, including language-use expectations, parental demands, and teacher role conflict. The paper focuses on how English pedagogy has been reshaped in response to bilingual mandates: through code-switching, localised content creation, and culturally responsive strategies that foster learner engagement. It also discusses the evolving identity of the English teacher—from a language instructor to a cultural mediator and policy negotiator. By foregrounding practitioner perspectives, this presentation aims to contribute a grounded voice to global conversations on bilingual education. It argues that meaningful bilingual practice requires not only policy support, but also teacher agency, local flexibility, and reflexive teaching approaches.

09:55-10:20
97435 | *Japanese Students' Willingness to Communicate in EFL Classrooms: The Role of Proficiency, Teacher-student Relationship, and Student-student Relationship*
Wakana Sakoda, Ryukoku University, Japan

Fostering Willingness to Communicate (WTC) during lessons is essential in English as a Foreign Language context, such as Japan, where Communicative Language Teaching (CLT) approach is emphasized. Recent studies (e.g., Toyoda et al., 2021) have shown that students' self-perceived English proficiency (PEP) is a strong predictor of their WTC. Other researchers (Peng, 2014; Li et al., 2021) have reported that the classroom environment, particularly Teacher-Student relationship (TSR) and Student-Student relationship (SSR), also play an important role. In Japan, where there is a culturally strong emphasis on social harmony and group belonging, students' perceptions about TSR and SSR might be crucial for enhancing their WTC. The present study aimed to examine the extent to which students' WTC was accounted for by TSR, SSR, and PEP. Data were collected from 220 students across three-year groups at a Japanese public high school. One-way ANOVA revealed that WTC, SSR, TSR, and PEP were significantly different across school years. Multiple regression analysis identified SSR as the strongest predictor of WTC, followed by PEP and TSR. These results underscore the importance of enhancing peer communication by building emotionally secure classroom relationships. Teachers are encouraged to foster a sense of trust and belonging among students, potentially through group-based tasks or relationship-building activities. In addition, the findings suggest that teacher education programs may benefit from including training that enhances teachers' awareness of interpersonal dynamics and their impact on students' willingness to participate in classroom communication.

10:20-10:45
97173 | *Challenges in Taiwan's Hakka Language Immersion Teaching for Two-Year-Old Class in Preschools*
Ya Ling Chen, National Pingtung University, Taiwan

This study investigated the implementation challenges of Hakka language immersion teaching in Taiwanese toddler classes. Using a quantitative approach, we surveyed 72 teachers from Hakka immersion programs across Taiwan, examining difficulties across child, teacher, and parental dimensions. Results revealed language development and communication posed the greatest challenge (M=3.94), followed by parental factors (M=3.83) and curriculum/instruction (M=3.36). Children particularly struggled when physically uncomfortable or emotionally aroused, reverting to Mandarin instead of Hakka (M=4.40, 4.38). Our findings demonstrated significant correlations between teachers' professional backgrounds and perceived teaching difficulties. Teachers with higher Hakka language certification levels and more professional development reported fewer challenges, while those using non-mainstream dialects experienced greater difficulties. ANOVA analyses revealed significant differences across five background variables, including teaching experience, language certification, dialect type, and training participation ($p<.05$). Based on these results, we recommend differentiated teacher support systems, multi-sensory teaching approaches, enhanced parental involvement, optimized teacher training, and equitable distribution of dialect-specific resources to improve Hakka immersion education effectiveness in early childhood settings.

10:45-11:10
95741 | *Educational Experiences and Outcomes of English Language Learners (ELLs) in New Zealand's National Certificate of Educational Achievement (NCEA) System*
Stephen Agnew, University of Canterbury, New Zealand
Courtney Comley, University of Canterbury, New Zealand

This study examines the educational experiences and outcomes of English Language Learners (ELLs) within New Zealand's National Certificate of Educational Achievement (NCEA) system. Using data from the Integrated Data Infrastructure (IDI), this research aims to identify academic trends among ELLs, focusing on their attainment of NCEA credits and qualifications. Non-parametric tests (Chi-square, Kruskal-Wallis, and Wilcoxon rank-sum tests) will be used along with binary logistic and semi-parallel ordinal logistic regression to analyse the data. Predictor variables analysed include ethnicity, whether ESOL funding is eligible, nativity (NZ born v migrant), gender, and a SES deprivation variable. Outcome variables include university entrance (UE) attainment, school leaving qualification, highest post-school qualification, post-school pathway, and educational mobility (post-high school qualification gained). The study investigates whether school qualifications enable ELLs to progress into further education and how their outcomes compare to those of non-ELLs. Additionally, special attention is given to Pacific ELLs, who are often disproportionately affected by school exclusion and experience lower participation rates in higher education. The findings from this research will provide valuable insights to inform educational strategies and policies aimed at supporting ELLs in achieving academic success. Initial findings show UE attainment to be the highest for non-Pasifika ESOL learners, and lowest for Pasifika ESOL learners. A similar pattern is found for the probability of attaining a higher qualification post-secondary school. Non-Pasifika ESOL learners exhibited the highest participation in higher education. In contrast, Pasifika ESOL learners were found to be substantially under-represented in both further education and employment, after allowing for SES.

11:25-12:15 | Room 601 (6F)

Wednesday Onsite Parallel Session 2

ACE2025 | AI in Education (Workshop)

Session Chair: Jet Tonogbanua

11:25-12:15

101525 | *Designing Formative Feedback AI Agents for Learning and Teaching*

Jet Tonogbanua, University of Auckland, New Zealand

This workshop introduces a practical framework for integrating AI agents into teaching, based on formative feedback AI tool that was implemented in a university setting in New Zealand. Drawing from learning theories—behaviourism, cognitivism, and constructivism—the session explores how AI can be introduced strategically in classrooms. The facilitator will use the metaphor of a wild horse to frame AI tools, like ChatGPT, as powerful but unpredictable "buddies" that require careful handling. The key strategy applied is ring-fencing—setting clear context boundaries to ensure AI tools stay focused on learning goals, rather than jumping the fence and roaming freely across the vast landscape, where they risk going off-task or hallucinating. The workshop is interactive and task-oriented. Participants are encouraged to bring a laptop to access Gemini, Copilot, or ChatGPT using free, paid, or institutional accounts, and design a Minimum Viable AI Agent tailored to a specific teaching scenario.The facilitator will demonstrate how to build an AI agent that provides guided, structured formative feedback to support student learning. By the end of the session, participants will leave with a functional AI agent they can immediately use in their own teaching. This workshop is ideal for educators who want to integrate AI confidently and ethically, using pedagogical principles to ensure technology enhances learning.

11:25-12:40 | Room 603 (6F)

Wednesday Onsite Parallel Session 2

ACE2025 | Innovative Technologies in Education

Session Chair: Retno Dwi Lestari

11:25-11:50

97276 | *Investigating Context and Target Group for Developing an AI-Assisted Constructivist Mobile Learning System to Enhance Youth Oral Presentation Skills*

Chotigan Siripauntuntigul, Khon Kaen University, Thailand
Parama Kwangmuang, Khon Kaen University, Thailand

This study aims to investigate the context and target group for developing a mobile learning system based on constructivist theory and AI-assisted tools to enhance oral presentation skills among youth. The research employs a mixed-methods approach, involving a sample of 250 youth aged 15-18 years old from diverse socio-economic backgrounds in Khon Kaen, Thailand. Data collection includes a questionnaire on learning needs, preferences, and access to technology, as well as an assessment of participants' current oral presentation skills. The results indicate that 85% of the youth own smartphones, and 75% express a strong interest in using mobile learning for improving their oral presentation skills. However, 60% of the participants rate their oral presentation skills as "poor" or "fair," with a mean score of 2.5 out of 5 (SD = 0.8) on the assessment. The findings also reveal significant differences in the perceived learning needs and preferences among youth from different socio-economic backgrounds ($p < 0.05$). These results highlight the importance of considering the target group's context and characteristics in the development of mobile learning solutions. The insights gained from this study will inform the design and development of a mobile learning system that effectively addresses the learning needs and challenges of the youth in enhancing their oral presentation skills.

11:50-12:15

101569 | *Drone Integrated Cross Disciplinary STEM Curriculum with Interactive Simulations and Guided Inquiry Based Learning*

Chung Yiu Richard Yeung, the Education University of Hong Kong, Hong Kong
Chi Ho Bill Yeung, the Education University of Hong Kong, Hong Kong
Daner Sun, the Education University of Hong Kong, Hong Kong
Tat Shing Choi, the Education University of Hong Kong, Hong Kong

This study presents the design, implementation, and evaluation of a drone-integrated, cross-disciplinary STEM curriculum supported by GenAI created interactive simulations for secondary students. Building on a systematic review and a preliminary drone-enabled STEM course with 16 students, which yielded gains in psychomotor and affective domains but revealed gaps in mathematics and programming, we developed the drone-integrated cross-disciplinary STEM curriculum. The 12-hour program, scaled to over 200 students in Grades 8–11 across 14 schools, emphasizes experiential and project-based learning through scientific inquiry, problem-solving, and engineering design. To address abstract concepts, safety, resource constraints, and coding fluency, educators co-designed a suite of web-based simulations, including Satellite Positioning, Virtual Flight, QuadPhysics, Dronography Angle of View, and Code Simulation, within a hybrid intelligence framework informed by the AI-TPACK model. The platform supports guided inquiry-based learning, enabling multi-, inter-, and trans-disciplinary integration. Results indicate heightened engagement, collaboration, and practical skills, alongside strengthened mathematics and programming outcomes compared with the pilot. Teachers reported improved instructional effectiveness and accessibility. This work synthesizes prior evidence and details an iterative approach to curriculum refinement, demonstrating how drone technologies and educator-guided simulations can enrich STEM learning and better prepare students with the critical thinking and problem-solving capacities required for complex, real-world challenges.

12:15-12:40

97469 | *Design Thinking-Drive Business Modelling and AI Utilization: A Study on University Students' Entrepreneurial Competencies*

Retno Dwi Lestari, Universitas Negeri Jakarta, Indonesia
Citra Ashri Maulidina, Universitas Negeri Jakarta, Indonesia
Ari Putra, Universitas Bengkulu, Indonesia
Yana Nursita, Universitas Singaperbangsa Karawang, Indonesia
Mustadim Wahyudi, Universitas Islam Nusantara, Indonesia
Iip Saripah, Universitas Pendidikan Indonesia, Indonesia

University-based entrepreneurship education is widely recognized as a critical component in fostering adaptability and enhancing startup competencies among youth. However, the proportion of new entrepreneurs remains relatively low in comparison to the national economic demands. This study investigates the extent to which the application of design thinking, supported by artificial intelligence (AI) tools, can enhance students' startup competencies. A quantitative research design was employed, utilizing structural equation modeling (SEM) for data analysis. The respondents were selected through judgmental sampling, comprising 179 students who had completed an entrepreneurship course. Data were collected via questionnaires and analyzed using SmartPLS 4 software. The findings indicate that design thinking has a significant positive impact on students' startup competencies. Furthermore, design thinking was found to significantly influence AI adoption; students engaged in design-thinking-based instruction were more inclined to utilize AI tools in developing their business models. However, the adoption of AI did not exhibit a significant direct effect on startup competency. As a result, the mediating role of AI adoption in the relationship between design thinking and startup competency was also found to be non-significant. These findings suggest the need for further investigation into how design thinking can be more effectively integrated with AI tools to optimize learning outcomes.

11:25-12:40 | Room 604 (6F)
Wednesday Onsite Parallel Session 2
ACE2025 | Higher Education
Session Chair: Eva Muchova

11:25-11:50
93893 | *Using Webquest Teaching to Train Self-study Skills for Pedagogy Students at Can Tho University*
Thu Tran Thi Kiem, Can Tho University, Vietnam

The article presents the process of using Webquest and proposes a self-study skills framework for pedagogical students including 09 component skills. The researcher organized teaching in a class for the subject "Physics for Biology" with 15 students majoring in natural science pedagogy, these students are studying in the second year at the Faculty of Pedagogy, Can Tho University, Vietnam. The researcher used a purposive sampling tool including: (i) Webquest teaching page based on Bernie Dodge's process research - publishing links, websites with access addresses; (ii) Support form for students to self-study; (iii) Exercises for students to self-study at home; (iv) Feedback survey form from learners; (v) pre- and post-tests with Webquest including 20 questions of the same difficulty level; (vi): self-assessment likert table for 9 component skills for students. We analyzed the quantitative results using paired sample t-test. The results showed that the researcher received positive feedback from the students, with 93.33% liking the teaching method using Webquest, the component expressions of students' self-study skills also increased, and the average test score also improved. The researcher believes that applying webquest can train self-study skills for pedagogical students.

11:50-12:15
101225 | *Developing a Beginner-Level Japanese Conversation Program Through the Integration of Metaverse and ChatGPT*
Jung Ae Kang, Pusan National University, South Korea
Eun Young Kim, Pusan National University, South Korea
Hye Ran Lee, Pusan National University, South Korea

This study develops a beginner-level Japanese conversation program by integrating the Metaverse and ChatGPT to overcome the limited immersion and authentic practice found in traditional instruction. The program provides virtual environments replicating everyday Japanese contexts—such as villages, cafés, and transportation—where learners practice conversations in culturally rich settings. ChatGPT acts as an interactive partner, offering adaptive feedback on grammar, vocabulary, and pronunciation while fostering self-directed learning. A pilot implementation was conducted with 32 first-year university students majoring in Japanese-related fields over eight weeks. Learners engaged in scenario-based role plays in the Metaverse while interacting with ChatGPT-driven dialogue prompts. Data collection included conversation logs, surveys, and performance assessments. Preliminary findings indicate notable improvements in learners' confidence, intercultural awareness, and willingness to communicate. Transcript analysis revealed gains in lexical variety and conversational length. Learners also highlighted the motivational impact of immersive settings, despite minor technical challenges. This study demonstrates the potential of combining immersive technologies with generative AI to provide authentic and motivating learning experiences for beginners. Beyond enhancing communicative competence, cultural sensitivity, and learner engagement, this approach offers a transformative framework for technology-enhanced language education. It positions Metaverse–AI integration as a forward-looking model with broad implications for the future of global language learning.

12:15-12:40
97466 | *Teaching in the Digital Age: an Innovative Open Educational Platform as a Digital Teaching Tool*
Eva Muchová, Bratislava University of Economics and Business, Slovakia
Peter Leško, Bratislava University of Economics and Business, Slovakia

The digital transformation of higher education has increased the demand for effective, accessible and adaptable pedagogical tools. This paper presents an interactive open educational platform developed by a team at Slovak University. The continuously developing, comprehensive e-learning resource is designed to support the teaching of economic principles. It is intended for secondary school students interested in economics, university students enrolled in introductory economics courses, and the general public. It offers structured modules combining educational videos, interactive quizzes, case studies and supplementary content, all presented in a clear, engaging and student-friendly format. The platform supports various teaching modes, including in-person, hybrid, and fully online instruction, fostering independent learning. The main objectives are to deepen conceptual understanding, build digital skills and boost student motivation by integrating visual and interactive elements into traditional curricula. Empirical data were collected through feedback from university instructors and students who used the platform for teaching and learning purposes. Suggestions for improvement, mainly regarding the application of theoretical knowledge to real-world economic phenomena, will be taken into account. Additionally, the paper presents a comparative evaluation of other educational platforms used in economics instruction. Overall, this open educational resource demonstrates how digital tools can enhance economic education, providing a model for future innovations in online and hybrid pedagogy.

11:25-12:40 | Room 605 (6F)
Wednesday Onsite Parallel Session 2
ACE2025 | Educational Policy, Differences in Higher Education
Session Chair: Steve Agnew

11:25-11:50
97180 | *Enhancing Mental Health Support in Philippine Basic Education: A Policy Analysis Modeled After University-Based Psychosocial Services*
Edzel Louise Vargas, University of the Philippines, Philippines

The post-pandemic mental health crisis among Generation Z and Alpha learners underscores the urgency of revisiting Philippine education policy. Although the Mental Health Act of 2018 and the Basic Education Mental Health and Well-Being Promotion Act aim to protect student well-being, implementation has revealed systemic gaps: insufficient psychosocial personnel, lack of digital data systems, curriculum misalignment, and fragmented delivery services. This policy analysis advances a scalable, context-responsive framework modeled after the University of the Philippines Diliman's Psychosocial Services (UPD-PsycServ) — a locally grounded, evidence-informed system with demonstrated effectiveness. Its selection stems from its holistic, culturally appropriate, and data-driven approach. Using a qualitative research design, the study documents analysis of mental health laws and PsycServ practices which were thematically triangulated. Participants of expert interviews involving school-based mental health practitioners and education leaders were selected through purposive sampling. The proposed framework introduces a three-phase strategy: (1) pilot deployment in selected schools with personnel training, (2) digital integration of services and centralized data management, and (3) sustained capacity-building through curriculum-aligned psychosocial education and mental health internship programs. These phases are structured around four foundational pillars: digitalization, data management, curriculum integration, and capacity expansion through academic partnerships. Together, they respond to policy implementation weaknesses while offering a scalable model for long-term reform. This paper equips education leaders and policymakers with a replicable roadmap for embedding sustainable, learner-centered mental health systems across Philippine basic education.

11:50-12:15
97535 | *Disseminating Neurodiverse Feminist Pedagogy: An Applied Case Study from a Japanese Contemporary Culture Seminar*
Zita Silhavy, Eötvös Loránd University, Hungary

This dissemination follows my earlier presentation on the framework Neurodiverse Feminist Pedagogy (NFP) (Silhavy, 2025), which integrates strength-based neurodiversity theory (Kapp, 2020; Armstrong, 2012) with critical feminist pedagogy (hooks, 1994; Julé, 2017; Baxter, 2003) to counter structural exclusions in higher education. NFP foregrounds the epistemic legitimacy of neurodivergent learners while reconfiguring classroom power relations through inclusive design, dialogic exchange, syllabus co-construction, and critical reflexivity. This paper presents the first empirical application of NFP in a Master's-level seminar on Japanese contemporary culture at a Hungarian university. The instructor, a researcher in Japanese language revitalisation, co-developed the course using NFP principles including multimodal participation, decentring of authority, and proactive accessibility (Kumar & Wideman, 2014; Tobin & Behling, 2018). Data were collected through: (1) two semi-structured interviews with the instructor; (2) pre- and post-course Likert-scale questionnaires (n = 120) measuring perceived inclusion, self-efficacy, and cognitive engagement (Schunk & DiBenedetto, 2020); and (3) classroom observations by the author using a tertiary inclusion framework (Florian & Spratt, 2013). Findings indicate enhanced affective engagement, participation, and learner autonomy—especially among neurodivergent students, often marginalised in normative settings (Kormos, 2017; Milton, 2012). The instructor reported increased dialogic learning and co-construction of knowledge. Learner responses varied in reflection of their cognitive profiles and motivation for further academic engagement in Japanese cultural studies. This study supports NFP's interdisciplinary and transnational relevance, aligning with ACE's mission of equity and educational justice.

12:15-12:40
95742 | *Cultural Connectedness and Sense of Belonging at School*
Stephen Agnew, University of Canterbury, New Zealand
Paris Mackenzie, University of Canterbury, New Zealand

Māori and Pasifika students in Aotearoa New Zealand continue to experience significant disparities in academic achievement compared to their non-Māori/ Pasifika peers. While socio-economic status and systemic biases are often cited as contributing factors, existing models have struggled to fully explain these disparities. A potential factor is cultural connectedness: the extent to which Māori and Pasifika students feel embedded in and identify with their cultural heritage. Prior studies suggest that some non-Pakeha students report lower levels of school belonging and higher rates of discrimination, which may influence educational outcomes. This research used Principal Component Analysis (PCA), Confirmatory Factor Analysis (CFA), and Structural Equation Modelling (SEM) to develop a scale to measure cultural connectedness and a sense of belonging at school.
The findings will provide practical insights for educators and policymakers by highlighting the influence of cultural identity on academic engagement and expectations of going on to higher education.

11:25-12:40 | Room 607 (6F)
Wednesday Onsite Parallel Session 2
ACE2025 | Education, Sustainability and Society
Session Chair: Jackson Jake Llames

11:25-11:50
96145 | *Do Parents Know Best: Daily Navigation and Policy Making in the Age of Parental Rights / Advocacy*
Chris McCarty, University of Tennessee, United States

A growing political divide in the United States spreads farther and farther into American classrooms, with parental rights advocates gaining traction throughout the South and Midwest. Driven by concerns over curriculum transparency, parental control, and student exposure to controversial materials, these advocates seek to chip away at academic freedom and limit liberal influences. In red states, the parental rights movement focuses restricting student exposure to topics such as race relations, gender identity, and other LGBTQ+ issues. In Tennessee, for example, the Legislature previously passed the Age-Appropriate Materials Act. This Act specifically defines what conservative politicians see as "age-appropriate" for students, mandating that schools remove materials which touch on nudity, sex, and/or excess violence. In contrast, politicians and education advocates in blue states typically focus on the assurance of inclusivity protections and the expansion of educational access. Laws and local policies in those states tend to prioritize – rather than limit – diversity, equity, and inclusion (DEI) efforts. As these divergent efforts expand, and as red and blue states grow farther and farther apart both politically and now educationally, what will the United States look like in 20 years – or even 50 years – as students growing up in contrasting atmospheres will now come with not only different worldviews, but also with different educational experiences? This presentation will not only touch on how this is all playing out across legislative halls and board rooms, but also on how judges are often being asked to step-in once political agendas come face-to-face with inalienable rights.

11:50-12:15
100332 | *Parental Engagement in Children's Literacy Development Across Income Groups: A Comparative Analysis*
Na-Thinamalar Magiswary Nadarajan, University of Selangor, Malaysia
Lim Seong Pek, INTI International University, Malaysia

This study investigates parental engagement in children's literacy development across three income groups in Selangor, Malaysia. A total of 423 parents participated in this study, which utilised a 19-item questionnaire that measured parental supervision of academic engagement, access to resources, digital tools, and emotional support. The study employed a quantitative, cross-sectional, comparative survey design. The results were analysed using descriptive statistics and comparative analysis to investigate the income groups. Findings indicate that all three income groups demonstrate strong involvement and support in their children's literacy development but differ in the manner in which this support is provided. Middle-income parents exhibit the most consistent support among the three income groups. Low-income parents show their support through emotional and hands-on support. While high-income group parents provide their children with plentiful material and digital resources, they often rely on external support for academic guidance. The findings highlight that the common challenges faced by parents across all income groups were vocabulary comprehension and keeping track of the reading routine. A crucial finding from the study indicated that emotional involvement and appropriate parenting style are vital, rather than income alone. The implications for inclusive literacy interventions and education policy are examined.

12:15-12:40
97128 | *Mapping and [Re]Conceptualizing Safe Spaces Created for Children Amidst Pandemic in the Philippines: A Cartographic Study*
Jackson Jake Llames, Polytechnic University of the Philippines, Philippines

The COVID-19 pandemic has reshaped daily life for children, especially in urban communities. This study examines how children aged 9 to 13 in selected barangays of Manila, Philippines, now define and experience "safe spaces." Using a cartographic approach, nine (9) participants created drawings to show where they felt secure or vulnerable in their neighborhoods. These visual materials were paired with in-depth interviews, allowing children to explain the significance of the places they depicted. Analysis combined content coding of drawing features, visual semiotics to interpret symbols and spatial relationships, and narrative mapping to connect children's stories with their drawings. Interview transcripts were also examined to understand how children described changes in their environments and their feelings about safety during the pandemic. Results show that children's ideas of safety are shaped by personal encounters, family routines, and community events. Many participants noted that the pandemic increased their exposure to risks, including violence and restricted movement, which changed how and where they felt protected. Despite these challenges, children expressed a strong need for spaces that are welcoming and supportive, and described how their understanding of safety has grown more complex over time. This research highlights the importance of listening directly to children's perspectives. By using their maps and stories, adults and community leaders can better design programs and spaces that truly meet children's needs, especially during times of crisis.

11:25-12:40 | Room 608 (6F)
Wednesday Onsite Parallel Session 2
ACE2025 | Educational Policy, Leadership, Management and Administration
Session Chair: Janice Penaflor

11:25-11:50
101283 | *Parental Perceptions of Taiwan's Bilingual 2030 Policy: A Case Study of a Junior High School in Taipei*
Pei-Ying Tsai, National Taiwan Normal University, Taiwan

This study explores parental perceptions and expectations regarding the implementation of Taiwan's "Bilingual 2030 Policy" at the junior high school level. In a 2020 Taipei City Government survey, one of the results indicated that over 90% of elementary and junior high school parents supported the implementation of bilingual education. However, differing views have emerged as the policy has been enacted. Parents broadly endorse the idea of bilingual education, but their understandings of its objectives and practices vary. Moreover, the public concerns about this bilingual education policy remain. This study is a preliminary attempt to prob deeper into the less discussed aspect of bilingual education in Taiwan. The objective of this study is to understand parents' perception of bilingual education in a junior high school through a qualitative approach. Data were collected through semi-structured interviews with parents at a Taipei junior high school in the city's bilingual school project. The findings suggest that parents' knowledge of the policy is limited and often shaped by media coverage or school communications. Consequently, bilingual education is interpreted inconsistently, ranging from a tool for logical thinking and cultural exchange to the misconception of it being full English-medium instruction. These gaps in understanding contribute to skepticism and uncertainty. Previous studies on bilingual policy in Taiwan have largely focused on teachers or students, while parents' perspectives have seldom examined. By foregrounding parental voices, this research highlights an underexplored stakeholder group and offers international readers a distinctive lens to consider the opportunities and challenges of bilingual policy implementation.

11:50-12:15
100997 | *Sustainable English Language Centers Through EdTech and Social Enterprise: Building Human Capital in Resource-Constrained Contexts*
Kay Khaing, Myat Kay Khaing English Classes, Myanmar

Human capital, defined as the stock of knowledge and skills within people to increase productivity (Becker, 1964), is essential for national development. Economists agree that countries with highly educated populations tend to have higher productivity, while those with lower educational attainment often face formidable economic challenges. (OECD, 2023). In conflict-affected countries like Myanmar, proficiency in the English language is viewed as a valuable human capital asset, particularly in a globalized world (Ali, Hamid, & Hardy, 2023). This presentation explores how an English Language Teaching (ELT) center, integrating education technology (EdTech) into a social enterprise framework, can function as a strategy to advance equity, reduce poverty, and build human capital in a resource-constrained context like Myanmar. This model leverages online learning platforms, cloud-based data management, and digitalized registration to reduce operational costs, expand geographic reach, and increase learning opportunities. These advantages enable a social enterprise framework that cross-subsidizes tuition fees, offering free workshops and discounted classes to students from public schools. It also highlights the scalable avenues for a sustainable ELT center as a social enterprise, combining both conceptual and empirical evidence from Myat Kay Khaing English Classes, a Myanmar-based Pearson-accredited IGCSE center. The study integrates structured interviews with educators and students alongside quantitative analysis of enrollment growth, retention rates, and cost-efficiency measures to illustrate how this model can be implemented and adapted. The study concludes with policy recommendations for integrating EdTech-supported social enterprise approaches into national language education strategies to promote equity and reduce poverty.

12:15-12:40
96884 | *Charting Change in Academic Library Leadership Post-COVID: A Scoping and Bibliometric Review*
Janice Peñaflor, De La Salle University, Philippines
Efren Torres Jr., De La Salle University, Philippines
Muna Ahmad Abdulla, Khalifa University, United Arab Emirates
Joenabie Arevalo, Ateneo de Manila University, Philippines

The COVID-19 pandemic accelerated transformative changes in academic libraries, prompting leaders to respond to unprecedented disruptions (Soto-Acosta, 2020). Despite this, Dumulescu and Muţiu (2021) observed limited empirical research on academic library leadership during crises. This scoping review and bibliometric analysis examines literature from 2020–2025 to identify emerging leadership themes, strategies, and frameworks in response to the pandemic. It addresses three research questions: (1) What leadership themes and strategies emerged post-COVID? (2) Who are the most influential contributors in this area? (3) What conceptual models underpin these studies, and what gaps remain? Following the Joanna Briggs Institute (JBI) framework and PCC model, the review focused on leadership in academic libraries during the post-COVID era. Of 251 articles identified, 124 met the inclusion criteria. Screening and charting were conducted by four authors using the PRISMA-ScR checklist, alongside a bibliometric analysis to examine key journals, authors, and trends. Five dominant themes emerged: Crisis and Adaptive Leadership, Collaborative Leadership, Equity-Focused Leadership, Strategic Leadership, and Innovation-Driven Leadership, particularly in technology and AI integration. Influential journals included Journal of Academic Librarianship, Library Management, and Library Leadership and Management, with key contributions from Harisanty et al. (2024), Ashiq et al. (2021), Winkler & Kiszl (2022), and Lo et al. (2020). Conceptual models such as Transformational, Shared, and Adaptive Leadership, along with Learning Organization Theory, were referenced, though often not applied rigorously. This study offers actionable insights for library leadership and highlights areas for further research, including DEI integration, leadership development, and digital transformation.

11:25-12:40 | Room 702 (7F)
Wednesday Onsite Parallel Session 2
ACE2025 | Education and Difference
Session Chair: Kahfi Hizbullah

11:25-11:50
101301 | *Degrees Without Doors? Exploring the Transition to Work for Differently Abled University Graduates*
Agampodi Nirwadya Nirikshani Mendis Gunasekara, Research Intelligence Unit, Sri Lanka
Hoshin De Silva, Research Intelligence Unit, Sri Lanka
Tharangi Jayamali Wanigasuriya, SLTC Research University, Sri Lanka

Despite Sri Lanka's UN Convention on the Rights of Persons with Disabilities and 3% quota, graduates with disabilities face global and local employment inequities, earning less and encountering barriers. This study explores the transition of recent graduates from public universities who are differently abled or with different learning difficulties to the work force in Sri Lanka using a mixed method approach, including: (i) a 12-month post-graduation survey using the Washington Group questions, (ii) semi-structured interviews with graduates, career-services staff, and employers (iii) a review of recruitment and onboarding policies and practices. The preliminary findings identify three main barriers to this transition. First, readiness to apply; several lack accessible career services, assistive technologies, and internship opportunities. Second, hiring and entry; inconsistent compliance with hiring quotas, inaccessible application processes, and limited accommodations. Third, retention and progression, the lack of budgets for required accommodations, and an inflexible probation or performance system. Further, this study suggests implementing practices like accessible recruitment standards, disability-aware job-matching, internship-to-job bridges, and dedicated university–employer liaison roles, which correlate with quicker hiring, higher early-career retention. The paper concludes with actionable insights for Higher Education Institutions and policymakers: integrate disability questions in national graduate tracer surveys, hard-link quota compliance to procurement and promotion criteria, co-fund workplace accommodations via grants/levies, mandate accessibility in psychometrics and Applicant Tracking System, and embed Universal Design for Learning and specialist employment advising within universities. Taken together, these measures can open the doors to decent careers for graduates with learning difficulties and disabilities in Sri Lanka.

11:50-12:15
96970 | *Art as a Bridge: Supporting the Educational and Emotional Development of Hospitalized Children with Disabilities*
Lia Vasquez, National University of Rosario, Argentina

Children with disabilities who experience prolonged hospitalization often face double exclusion: from emotional development and from educational opportunities. In Latin America, few educational frameworks address the needs of children with complex medical conditions who are absent from formal schooling. This presentation shares the experience of an art-based approach that supports expression, learning, and connection in hospitalized or homebound children with physical disabilities. Drawing from three case studies (two children diagnosed with Spinal Muscular Atrophy (SMA) and one undergoing cancer treatment) this work explores how art therapy can foster emotional communication, cognitive engagement, and a sense of agency in children with limited mobility. Through drawing, color, and symbolic storytelling, these children found not only emotional relief but reconnected with learning processes from within clinical or home-care settings. This presentation frames art as a bridge: between therapy and education, body and imagination, fragility and strength. Grounded in developmental psychology and inclusive education principles, it offers practical strategies adaptable to diverse settings—particularly for educators, therapists, and caregivers working with children who live outside the boundaries of traditional classrooms. Ultimately, this session invites reflection on how inclusion can—and must—reach children in hospital beds and wheelchairs, advocating for approaches that see art not as an extra, but as an essential language of dignity, healing, and participation in education.

12:15-12:40
97371 | *Parental Understanding and Early Detection of ADHD: A Qualitative Exploration in Indonesia*
Kahfi Hizbullah, Universitas Negeri Jakarta, Indonesia
Iriani Indri Hapsari, Universitas Negeri Jakarta, Indonesia
Dewinta Ariani, Universitas Negeri Jakarta, Indonesia

Misunderstanding and stigma around children's behavioral challenges often lead to delayed recognition of neurodevelopmental disorders such as Attention Deficit Hyperactivity Disorder (ADHD) in Indonesia. Children with ADHD are frequently labeled as disruptive or disobedient, when in fact they require specific support to manage inattention, impulsivity, and hyperactivity. Early detection plays a crucial role in minimizing the long-term impact on their emotional and social development. However, parental awareness of ADHD remains low. This qualitative study explores parents' knowledge and ability to recognize early signs of ADHD. Using semi-structured interviews with 35 parents, results revealed that most participants had very limited, or no, prior understanding of the condition. Many parents were unfamiliar with the term ADHD itself, and those who had heard of it often held inaccurate beliefs, viewing the behavior as a result of poor discipline or parenting. As a result, early symptoms were frequently dismissed or misunderstood, leading to delays in seeking appropriate professional help. This lack of awareness contributes to missed opportunities for early intervention and can negatively affect the child's mental health. The study emphasizes the urgent need for targeted psychoeducation for parents to promote early identification and more effective support for children with ADHD.

11:25-12:40 | Room 703 (7F)
Wednesday Onsite Parallel Session 2
ACE2025 | Professional Training, Development and Concerns in Education
Session Chair: Nora Santillan

11:25-11:50
97814 | *Studying Literacy Teacher Educators' Negotiations of Community-Engaged Practices in Teacher Education*
Pooja Dharamshi, Simon Fraser University, Canada

This paper explores how literacy teacher educators (LTEs) negotiate community-engaged practices within their teacher education courses to advance equity and social justice. Responding to longstanding calls for a paradigm shift in teacher education (Ladson-Billings, 2006; Zeichner, 2016), this study examines how LTEs design literacy coursework that engages pre-service teachers with families, communities, and children beyond the classroom. Community-engaged teacher education centers local cultural and linguistic knowledges and positions them as essential to the preparation of equity-focused teachers (Zygmunt & Cipollone, 2019). Using Villegas and Lucas' (2007) framework of Culturally Responsive Teaching as an analytical lens, this study investigates how LTEs conceptualize community literacy practices, how they engage with their local communities, and how such engagement informs their pedagogical design. Data include interviews and artifacts from LTEs who embed community-engaged practices into their literacy methods courses. This research surfaces the pedagogical commitments, tensions, and possibilities involved in aligning university-based coursework with community knowledge systems. In response to critiques of social justice being treated as an "add-on" in teacher education (Goodwin & Darity, 2019), this paper situates community-engaged literacy pedagogy as foundational rather than peripheral. Findings illuminate how LTEs are reimagining their roles and reshaping the preparation of teachers by drawing on community literacy, relational pedagogies, and asset-based approaches to knowledge. This study offers insight and inspiration for teacher educators and administrators seeking to reorient literacy education toward more expansive, community-rooted visions of justice.

11:50-12:15
94799 | *Research Training Needs of Faculty in a Philippine State University*
Jonathan Etcuban, Cebu Technological University, Philippines

Research is significant for university teachers as these critical areas develop the expertise of these teachers, help broaden knowledge factors, and improve the quality of teaching. The study determined the research training needs of a Philippine state university faculty. The findings served as the basis for the Research Institutional Plan for faculty. The study's respondents were 145 faculty teaching general education and professional courses across the six identified university campuses. This study utilized a descriptive correlational method through a researcher-developed questionnaire. Frequency, mean, standard deviation, rank, Chi-square test of independence, and ANOVA were used to treat the gathered data. The study reveals that the research training needs of the faculty at the university campuses correlate with their years of teaching at the university. It was concluded that teachers need more research training in publications and guidelines for ethics. The researcher strongly recommends implementing, monitoring, and evaluating the proposed Research Institutional Plan for these faculty's professional growth and academic progress.

12:15-12:40
100470 | *Supporting International Faculty in Bilingual Programs in the US*
Nora Santillan, Wake County Public School System, United States

As bilingual programs rapidly expand across the United States, districts increasingly rely on international educators to lead bilingual classrooms. While these teachers bring valuable linguistic and cultural assets, they often encounter significant challenges navigating the U.S. public school system and the demands of bilingual instruction. This presentation explores the lived experiences of international teachers in North Carolina, with the goal of understanding how to better support them in their professional roles. Through semi-structured interviews with educators from diverse backgrounds, the study identified five key themes: becoming a bilingual teacher, acculturation into the U.S. school system, classroom and instructional challenges, support systems, and professional development needs. Findings reveal a disconnect between initial preparation and the realities of bilingual teaching, influenced by monolingual ideologies, systemic inequities, and limited culturally responsive training. By centering the voices of international educators, this research highlights the importance of context-specific professional development and targeted support structures. The study concludes with recommendations for school leaders and policymakers to design induction and training models that reflect the unique needs of international DLI teachers. Strengthening these systems is essential not only for improving teacher retention and effectiveness, but also for ensuring equitable and high-quality bilingual education for all students.

11:25-12:40 | Room 704 (7F)
Wednesday Onsite Parallel Session 2
ACE2025 | Teacher Education
Session Chair: Lai Ping Wong

11:25-11:50
95485 | *Becoming a Chemistry Teacher in the Age of AI: Pedagogical Encounters from School-Based Teaching Practice*
Almubarak Almubarak, University of Pendidikan Indonesia, Indonesia
Nahadi Nahadi, University of Pendidikan Indonesia, Indonesia
Yusi Riska Yustiana, University of Pendidikan Indonesia, Indonesia
Galuh Yuliani, University of Pendidikan Indonesia, Indonesia

Pre-service teachers are essential agents in educational transformation, especially in the context of artificial intelligence (AI) integration. Understanding student perceptions is key to assessing how AI can be meaningfully integrated into learning, especially regarding the level of trust and ease of use. However, studies exploring the use of AI by pre-service teachers in the context of teaching practice in schools are still limited. This study aimed to investigate students' experiences using AI in preparing and implementing learning during practice in schools. The method used was mixed methods with a sample of final semester chemistry education students at the University of Lambung Mangkurat, Indonesia, who were undergoing a teaching practice program in schools. The study refers to the Technology Acceptance Model (TAM) framework for the analysis of two main factors, namely "Perceived Usefulness" (PU) and "perceived ease of use (PEU)." Data were collected using questionnaires (quantitative) and in-depth interviews (qualitative). The results showed that in the PU dimension, around 82% of students felt that AI helped them understand complex chemistry concepts and helped them prepare for learning (86%). For the indicator that AI helps students find references and are ready to use it in learning, the percentage is the same at 96%, motivation (94%), and creativity in designing learning (96%). In the PEU dimension, 76% feel at ease regarding the accuracy of AI information, problem-solving skills (92%), and independent learning (76%), and all students agree that training/workshops on its integration in lectures are carried out.

11:50-12:15
97135 | *Challenges and Insights of Off-Campus Physical Education Student-Teachers in DepEd High Schools in the Philippines*
Jedidia Eunice Peña, Polytechnic University of the Philippines, Philippines

The off-campus teaching or practicum experience serves as an important milestone in the professional preparation of future Physical Educators, and during this period the decision lies with them whether they want to pursue the teaching journey or not. Grounded in Kolb's Experiential learning theory which emphasizes that learning is an ongoing process rooted on experience. This qualitative research study investigates the challenges and insights experienced by fifteen off-campus physical education student-teachers assigned in five different Department of Education (DepEd) high schools in the Philippines, selected based on its diverse teaching environments and existing practicum partnership. The central aim is to explore the specific difficulties these student-teachers encounter during their off-campus assignments and the valuable lessons they derive from these experiences. Utilizing a phenomenological approach, the research seeks to capture the essence of the participants' lived experiences through semi-structured interviews. The data was analyzed using thematic analysis through its six-phase framework such as become familiar with the data, generate initial codes, search for themes, review themes, define themes and write-up. The findings indicated that student-teachers encountered challenges such as time constraints, classroom management issues, and limited PE facilities. Their teaching adaptability helped overcome the challenges. These experiences improved their teaching skills, personal and professional growth, by making them more resilient, attentive to the varied learner needs, and confident in delivering instruction. This research can serve as foundation for developing more effective strategies to support aspiring physical educators, improve mentoring and support systems practices and inform curriculum development in teacher education programs.

12:15-12:40
96780 | *4E Blended Model for Drama Teacher Training: A Case Study from a District in a Southern Chinese City*
Wong Lai Ping, Hong Kong Metropolitan University, Hong Kong
Tsin Tak Shun, Hong Kong Metropolitan University, Hong Kong

This study examines the implementation of the 4E Blended Model for Drama Teacher Training to support in-service teachers with no prior experience in drama education in delivering a year-long drama curriculum. Conducted during the 2022–23 academic year in a district in southern China, the program involved over 30 teachers across 15 primary schools, each teaching drama lessons to Primary 4 classes. The study addressed two key research questions: (1) How effective is the 4E Blended Model in supporting teachers to teach drama in the classroom? and (2) What factors have the greatest impact on the effectiveness of the training model in improving teachers' instructional practices? The training model featured four components: Expert Demonstration, Experiential Training, Evaluated Practices, and Empowered Support, integrating online and face-to-face elements. A mixed-methods approach was adopted, combining quantitative assessments using the ICER Rubric, based on 16 indicators of effective drama teaching, with in-depth interviews conducted with teachers from the five highest-performing schools. The findings demonstrated that the 4E Blended Model effectively enhanced teachers' confidence, facilitation skills, and ability to engage students in large, student-centered, CTS-based (Creative Teaching Strategies) drama classes. Key factors influencing success included the strategies within the 4E Model, particularly teachers' ability to repeatedly review expert teaching videos, peer lesson recordings, and expert commentary on the recordings. Additionally, teacher traits, supportive environments, and sustained implementation were indispensable factors. The study highlights the potential of the 4E Blended Model in fostering creativity, collaboration, and professional growth in diverse educational settings.

11:25-12:40 | Room 705 (7F)
Wednesday Onsite Parallel Session 2
ACE2025 | Curriculum Design and Development
Session Chair: Shirley Huang

11:25-11:50
100922 | *Exploring the Psychometric Properties of a Tool to Measure Teachers' Competencies for Inclusive Education*
Princess Zarla Raguindin, Philippine Normal University, Philippines

This study examined the psychometric properties of a scale to assess the competencies of in-service teachers in inclusive education. The tool reflects the integration and interconnection of knowledge, skills, and attitudes that teachers have to acquire and develop to implement robust and sustainable inclusive education. Initial items were generated through three iterations of a Delphi study involving 12 experts, resulting in 52 indicators across six domains. Construct validity was examined through factorial analysis on data from a pilot test involving 230 general and special education teachers. The analysis yielded a four-factor structure —Pedagogy for Inclusive Classrooms, High Regard for the Principles of Inclusion, Engagement Towards Personal and Professional Development, and Adherence to the Advancement of Diversity—which explained 72.17% of total variance. Structural equation modeling further confirmed the model's construct relationships. Internal consistency reliability was excellent across all factors (α = 0.939–0.954). The survey tool addresses a significant gap in existing tools by providing a full and contextually relevant measure that includes knowledge, skills, and attitudes toward inclusive education. The findings of the study support teacher training, curriculum design, and policy formation and implementation to advance inclusion. This can specifically be helpful in the context of developing countries where resources are scarce and the implementation of the inclusive agenda remains challenging. The scale provides a solid, rigorous, and research-informed framework for enhancing teacher preparedness in promoting equitable and quality education for all learners

11:50-12:15
101464 | *The Relationship Among Elementary Teachers' Intrinsic Motivation for Choosing a Teaching Career, Teacher Self-Efficacy, and Burnout*
Joonmo Yun, Jeju National University, South Korea

This study examined the relationships among elementary school teachers' intrinsic motivation for choosing teaching as a career, teacher efficacy, and burnout, and explored how interpersonal relationships among school members moderate and mediate these associations. Data from 1,054 elementary school teachers were obtained from the second wave (2020) of the Seoul Teacher Panel Study in South Korea. Descriptive statistics and correlation analyses were conducted among the variables of intrinsic motivation, teacher efficacy, and burnout. The mediating effect of teacher efficacy in the relationship between intrinsic motivation and burnout was then tested, followed by an analysis of the moderated mediation effect of interpersonal relationships among school members. The results indicated that teacher efficacy showed a significant partial mediating effect on the relationship between intrinsic motivation and burnout. Furthermore, interpersonal relationships among school members significantly moderated the mediating role of teacher efficacy in this relationship. Based on these findings, implications for educational practice and directions for future research are discussed.

12:15-12:40
97422 | *Bridging the Divide: Embedding Professional Recognition into Academic Learning*
Shirley Huang, University of New South Wales, Australia

As higher education institutions respond to increasing demands for career-ready graduates, there is a growing emphasis on pedagogical strategies that bridge the gap between academic learning and professional practice. We explore the integration of professional certification frameworks into university lecture content as a means of enhancing both academic rigour and industry relevance. Focusing on disciplines such as risk management, we design course materials and assessments to align with established certification standards, with the aim of deepening student engagement, strengthening conceptual understanding, enhancing applied knowledge, and facilitating pathways to recognised external credentials. Through curriculum mapping, the incorporation of industry-informed learning objectives, and the development of targeted assessments, educators can foster learning environments that promote both theoretical mastery and alignment with professional competencies. Drawing on our implementation experience, we illustrate how this certification-aligned approach effectively captures student attention, sustains engagement, enhances academic performance, and equips learners with the competencies required for credentialing and real-world application.

11:25-12:40 | Room 707 (7F)
Wednesday Onsite Parallel Session 2
ACE2025 | Architecture and Engineering Education
Session Chair: Purima Noiim

11:25-11:50
95439 | *A 4-Year Reflection: Evidence-Based Reflective Practice as Interventions to Help Engineering Students*
Ying-Wei Leong, Singapore Polytechnic, Singapore

This abstract documents the author's application of evidence-based reflective practice (EBRP), to enhance quality teaching for engineering education. For the past 4 years in Singapore Polytechnic's school of Mechanical & Aeronautical Engineering, he utilized a customized EBRP checklist as interventions for students in supplementary lessons and data-enabled flipped learning. The 10 core principles of learning embedded in his EBRP checklist, coupled with its evidence-based approach, was a structured template to enhance quality teaching. For supplementary lessons, the EBRP checklist was used by the lecturer as prediction of learning effectiveness before lessons, and as diagnosis after lessons. Initial qualitative data (n=3) showed that among the 10 core principles, in-class questions & answers and deliberate practice on key topics were particularly important. Subsequent quantitative data (n=71) also showed that final passing rates of up to 90% were achieved by previously failed students, for 7 semesters altogether. For data-enabled flipped learning, the EBRP checklist was used by the lecturer to provide in-class feedback to students as differentiated interventions. Initial qualitative data (n=7) showed that among the 10 core principles, in-class deliberate practice and inspiring case studies were particularly important. Subsequent quantitative data (n=365) also showed that final passing rates were up to 8% higher for data-enabled flipped learning classes, for 6 semesters altogether. From 2021 to 2025, analysis of qualitative and quantitative data collected from lecturers and students generally supported EBRP as interventions for engineering education. Limitations were also discussed, reminding lecturers of noteworthy points when using the EBRP checklist to help students.

11:50-12:15
96743 | *Learning from Error Analysis: Impact on Self-regulation and Learning Outcomes in Engineering Education*
Lilian Huang, Nanyang Polytechnic, Singapore

In engineering education, traditional teaching methods typically involve modelling, where tutors demonstrate worked examples, followed by learners applying the concepts through structured problem-solving exercises. Many learners become highly familiar with specific solution methods but struggle when faced with problems that differ from standard formats. In the current AI-driven educational landscape, where generative tools are often used to solve engineering problems, learners often accept AI-generated solutions uncritically, without evaluating their accuracy or underlying assumptions. This study explored the use of erroneous examples (activities that require learners to identify, explain and correct errors in flawed solutions) as a strategy to improve self regulation and learning outcomes. A total of 92 learners enrolled in a chemical engineering course participated in this study, where a mixed-method design was used. The treatment (erroneous examples) was administered three times over one semester, with a washout period in between each treatment. In the washout periods, learners learnt exclusively through modelling. The average post-test scores during the treatment period were significantly higher than those in the washout period, indicating improved learning outcomes. At the start and the end of the study, surveys (using items adopted from the Motivation Strategies for Learning Questionnaire) were administered to measure the learners' self-regulation. The scores for intrinsic goal orientation, self-efficacy, metacognitive self-regulation, task value and peer learning dimensions were significantly higher in the post-survey than in the pre-survey. Learners also found the erroneous examples valuable for deepening their conceptual understanding, helping them identify misconceptions, and sharpening their critical thinking skills.

12:15-12:40
101378 | *Pedagogical Innovation in Interior Architecture Education: Integrating a User-Experience Learning Model for Spatial Service Design*
Duangkamol Limwongse, King Mongkut's University of Technology Thonburi, Thailand
Purima Noiim, King Mongkut's University of Technology Thonburi, Thailand
Makoto Watanabe, Chiba University, Japan

This study presents the results of comparative classroom research exploring pedagogical innovation in interior architecture education through two approaches: the conventional design studio model and a user-experience–based learning model. The research examined how different instructional modes shape students' design processes, learning outcomes, and capacity for innovation in experiential architecture and new service design. In the conventional approach, students typically follow a linear process, beginning with site or user research, gathering requirements, and programming before developing design proposals. While effective for cultivating technical and creative skills, this process often privileges form and representation over the lived experiences of users. By contrast, the user-experience–based model required students to begin with experiential inquiry into user needs, unmet expectations, behaviors, and emotions. Reframing the design process around user insights encouraged students to move beyond conventional problem-solving toward empathetic and reflective design thinking. Both approaches produced aesthetically strong outcomes; however, the latter generated designs enriched with experiential architectural qualities, innovative spatial programming, and service-oriented solutions that integrated offline and online experiences. The research sample consisted of 18 third-year interior architecture students who engaged in both models through a flagship store design project. Their outcomes were compared in terms of technical skills, reflective insights, and the originality of their proposals. Findings suggest that while conventional pedagogy reinforces established competencies, user-experience–based learning represents a significant pedagogical innovation that cultivates empathy, adaptability, and leadership. These insights highlight the value of user-focused teaching models in advancing interior architecture curricula.

11:25-12:40 | Room 708 (7F)
Wednesday Onsite Parallel Session 2
ACE2025 | Foreign Languages Education and Applied Linguistics
Session Chair: Marlena Padgett

11:25-11:50
101388 | *Experiential Learning and Adaptations of Pre-service English Teachers: A Qualitative Analysis of Practicum Experiences in Japan*
Taiga Eckford, Ryukoku University, Japan

For many pre-service teachers in Japan, the teaching practicum marks their first authentic engagement with the realities of school life. Conducted during the final year of undergraduate programs, the practicum extends for two to three weeks, depending on the license sought. Although widely regarded as a cornerstone of teacher education, the kinds of experiential learning that occur during this short but intensive period remain underexplored. This study explores how two pre-service English teachers (one male, one female) experienced and interpreted their practicum experiences. Drawing on multiple in-depth interviews, it employed the Grounded Theory Approach to capture the subjective meanings participants attached to critical incidents (significant experiences during the practicum). The findings show that such moments were not confined to classroom instruction. While challenges in lesson pacing or classroom management were noted, equally influential were incidents outside formal lessons. For instance, unexpected feedback from a supervising teacher or casual conversations with students in the schoolyard prompted participants to reconsider their professional roles. These encounters reshaped their assumptions about what it means to teach, leading them to adapt their teaching styles and perspectives in unanticipated ways. In addition to such context-specific triggers, the study highlights the interplay of cognitive processes—reflection, reevaluation, and decision-making—with strong emotional responses, including self-doubt, anxiety, and growing confidence. These findings suggest that teacher education programs should acknowledge the formative role of both structured lessons and unplanned encounters, and that practicum design can be strengthened by creating structured opportunities for reflection on such experiences.

11:50-12:15
95711 | *Rethinking English-Only: What Vietnamese Teachers Teach Us About Real-World Language Learning*
Huong Thuy Vu, Mahasarakham University, Thailand
Eric A. Ambele, Mahasarakham University, Thailand
Pilanut Phusawisot, Mahasarakham University, Thailand

In Vietnam's rural secondary schools, teaching English comes with unique challenges. Students often speak multiple languages, including Vietnamese and local minority languages. This study looks at how English teachers in these settings use translanguaging—a flexible teaching method where English is mixed with students' other languages to improve understanding and classroom interaction. Based on Cenoz and Gorter's (2021) multilingual pedagogical translanguaging model, the study explores how teachers use both planned and spontaneous language shifts during lessons to help students learn better. Researchers observed classrooms, recorded lessons, took notes, and interviewed 9 teachers and 20 students across three grade levels. The findings show that translanguaging helps in five major ways: keeping students involved, making lessons clearer, increasing student confidence, supporting students at different skill levels, and helping manage behavior. While many students felt more comfortable and motivated, a few advanced learners preferred full English immersion. The research points to the benefits of embracing multiple languages in teaching and questions the long-standing belief that English should be taught in isolation. It recommends new language policies, better teacher training, and more attention to how students experience multilingual classrooms.

12:15-12:40
101042 | *Exploring English Education in Taiwan: Perceptions and Insights of Foreign English Teachers*
Marlena Padgett, The University of Houston, United States

In 2018, Taiwan launched its Bilingual 2030 policy to become a bilingual Mandarin-and-English nation. As part of this initiative, the Ministry of Education and private educational companies recruited foreign English teachers across K–12 settings. Having lived and worked in Taiwan, I have seen how these teachers bring valuable perspectives to the island's evolving English education landscape—yet their voices are rarely centered in research. In this presentation, I share findings from my doctoral research, which explores how foreign English teachers perceive current practices, policies, and systemic structures in Taiwan's English education system, and how their lived experiences align with or diverge from the goals of Bilingual 2030. Using a basic qualitative design with a phenomenological lens, I conducted one semi-structured interview with each of eight foreign English teachers from a range of school contexts. Through thematic analysis, I identified three key themes: (1) systemic gaps in policy and curriculum implementation, (2) superficial hiring practices, and (3) lack of support for culturally relevant teaching. These findings reveal a disconnect between the policy's aspirations and the realities in which teachers work. I argue that bridging this gap will require greater curricular accountability, equity-based hiring reforms, and sustained cross-cultural collaboration. By amplifying these teachers' experiences, I aim to contribute to broader conversations on global language policy, English language teaching, and culturally sustaining pedagogy in multilingual contexts.

13:40-15:20 | Room 601 (6F)

Wednesday Onsite Parallel Session 3

ACE2025 | Learning Experience, Student Learning and Learner Diversity (Workshops)

Session Chair: Kit Kuan Lum

13:40-14:30

101338 | *Accessibility in Service-learning: Lessons and Recommendations from Students with Disabilities*
Bruce Moghtader, University of British Columbia, Canada

Over the past decade, technology-assisted learning and the principles of Universal Design for Learning have significantly advanced accessibility and inclusion in higher education classrooms. However, less attention has been given to accommodating and including students with disabilities in experiential pedagogies such as community-based and service-learning. This qualitative study explores the perceptions and experiences of self-identified students with disabilities and medical conditions in curricular service learning (CSL). As a form of experiential education, CSL enhances personal and professional competencies by enabling students to apply classroom learning in real-world contexts (Taylor et al., 2015). It integrates academic study with meaningful community engagement, fostering practical skill development while advancing the public missions of post-secondary institutions. While case studies have examined CSL projects involving people with disabilities (Slivovsky et al., 2012; Casey et al., 2023), little is known about the perspectives of students with disabilities who participate in CSL. Existing literature suggests they remain underrepresented in these transformative learning opportunities (Dumitru, 2023). This study, conducted at a Canadian research-intensive university, investigates the barriers students with disabilities face in CSL and documents their recommendations for improving accessibility in experiential learning. Following an introduction and methodology, we present a thematic analysis of the findings and discuss implications for inclusive experiential education in theory and practice. During the workshop we seek to engage participants in topics and conversations that support inclusive learning experiences for all students.

14:30-15:20

96827 | *Bridging Disciplines: Integrating Biology and Geography for Meaningful Interdisciplinary Learning*
Melanie Lum, Academy of Singapore Teachers, Singapore
Anna Koh, Academy of Singapore Teachers, Singapore
Sin Yee Lim, Yishun Secondary School, Singapore

This presentation explores how overlapping concepts in Biology and Geography are used in crafting big ideas for inquiry-driven lessons that enhance student understanding. Participants will gain insights into how fieldwork strategies from both subjects provide students with multi-dimensional perspectives of the environment through biological and geographical lenses, deepening their appreciation of natural systems and human-environment interactions. The session will also showcase how students' learning has led to a call to action, empowered teachers to design their interdisciplinary lessons tailored to their students' profiles while leveraging community resources around their schools. An example will be drawn from a school in Singapore to illustrate the practical application of these strategies, its impact on student engagement and their learning outcomes. Educators attending this session gain actionable strategies to implement interdisciplinary learning in their own contexts that will foster rich student learning experiences.

13:40-15:20 | Room 603 (6F)
Wednesday Onsite Parallel Session 3
ACE2025 | Innovative Technologies in Education
Session Chair: John Bernard Alejo

13:40-14:05
97274 | *Investigating the Needs and Potential of Interactive Media in an AI-Enhanced Constructivist Learning Environment for English Vocabulary Acquisition Among Elementary School Students*
Jiratchaya Sakhampee, Khon Kaen University, Thailand
Parama Kwangmuang, Khon Kaen University, Thailand

This study aims to investigate the needs and potential of interactive media in an AI-enhanced constructivist learning environment for English vocabulary acquisition among elementary school students. The research employs a mixed-methods approach, involving 120 fifth-grade students and 10 English language teachers selected through stratified random sampling from four schools in Lopburi Province, Thailand. Data collection includes surveys on students' learning needs, difficulties, and preferences, as well as interviews with teachers regarding their perceptions of the current teaching practices and the potential of integrating AI and interactive media in vocabulary instruction. Quantitative data analysis reveals that 75% of students find vocabulary learning challenging, with 68% expressing a preference for interactive learning materials. Qualitative findings indicate that 80% of teachers acknowledge the limitations of traditional teaching methods and 90% recognize the potential benefits of AI and interactive media in enhancing vocabulary acquisition. However, 60% of teachers express concerns about the lack of technological infrastructure and training. These findings serve as a foundation for designing and developing an innovative learning system that effectively addresses the identified needs and optimizes the potential of emerging technologies in language education. This research contributes to the advancement of technology-enhanced language learning and offers practical implications for educators and researchers in the field.

14:05-14:30
101221 | *Development of a Sustainable Web Application for a Blended Learning Environment to Improve Standardized English Test Performance of Undergraduates*
Kusuma Bangkom, King Mongkut's University of Technology North Bangkok, Thailand

Despite compulsory English courses in their first year, undergraduate students across science, business administration, and engineering disciplines at KMUTNB struggle to maintain English proficiency, leading to subpar performance on standardized tests required for employment and further education. This issue points out the need for innovative solutions to continuously enhance receptive English skills. This quasi-experiment study aims to develop a web-based application via a blended learning environment that uses online resources and social networking to foster autonomous English language learning. We provided the 162 (later decreased to 27) non-English-major undergraduates with the free web application platform and live classes on Zoom for 8 months. The results suggested that while the web application via a blended-learning environment could help improve receptive skills, as shown by the higher TOEIC post-test score (13 and 7.11 points higher in listening and reading respectively), participation in the web application and live classes was considerably low, suggesting low self-regulated learning and underutilization. In addition, the web application prototype was successfully developed, signified by the high satisfaction of 3.54 on the 4-point Likert scale questionnaire, and perception of blended learning was positive according to the semi-structured interview. This finding suggests that offering completely free courses may not be the most effective way to improve language skills if learners lack sufficient motivation.

14:30-14:55
98244 | *Visualizing the Unspoken: Exploring AI in Bridging Gaps in Translating Ideas of an Architectural Students with a Dyslexic Condition*
John Bernard Alejo, National University, Philippines

One of the challenges in architectural education is that students are often challenged by comprehensive learning and expressing ideas that are typically reliant on the traditional text-based information that includes areas such as text-heavy vernacular architecture, building-code translation, logical reasoning, and poetic conceptual making. The research investigates how a dyslexic architecture student encounters difficulties such as reading comprehension, word recognition, written expression, and articulating their ideas; as a result, they often experience significant frustration and low self-esteem. In a recent report of UN Disability and Development, it notes that "persons with disabilities, including those with learning disabilities like dyslexia, are being left behind in progress." The research explores AI as an assistive tool to improve the architectural conceptualization and expression of spatial reasoning for these students. It investigates how AI generative-text assistance can translate the unspoken ideas of a dyslexic architecture student. The aims of this research were to (1) conduct a literature review on theories that optimize AI literacy, (2) develop a framework to sustain developmental progress in AI generative-text assistance, (3) conduct case studies on the performance of an architecture student with a dyslexic condition supported by comparative analysis, and (4) perform a qualitative research design and evaluate it through expert review that includes ethical recognition. In addition, the research reveals major thematic areas crucial for bridging AI and dyslexic conditions, as the resulting framework provides emphasis on (1) AI Information Synthesis, (2) AI Conceptualization and Visualization, (3) AI Articulative Development, (4) AI Social and Emotional Impact.

14:55-15:20
96921 | *Investigating the Impact of Chatbot Integration on Learning Effectiveness*
Yu-Ching Chen, Chinese Culture University, Taiwan
Yih-Jiun Lee, Chinese Culture University, Taiwan

As financial instruments become increasingly complex, individuals need stronger financial literacy to mitigate risks—particularly amid growing interest in investment and the rise of scams such as those involving cryptocurrency. Traditional investment education often emphasizes theoretical frameworks while neglecting practical applications and real-world experiences, which can reduce learners' motivation and engagement. To address this gap, recent educational research advocates repeated practice, personalized instruction, and timely feedback. Chatbots, powered by natural language processing, offer rich content, instant feedback, interactive dialogue, and personalized learning—fostering engagement, self-efficacy, and learning motivation. These features make chatbots a promising tool for investment education, especially for learners who may feel anxious about complex financial topics or fear making mistakes. However, despite their potential, research on the integration and effectiveness of chatbots in investment education remains limited, highlighting a need for further exploration. This study investigates the impact of integrating chatbot technology into investment education, focusing on learning performance, situation interest, cognitive load, and overall learning experience. A total of 23 university students participated in the experiment. Preliminary results indicate that students reported improved learning performance, high situation interest, low cognitive load, and a willingness to use chatbots in future learning. Students' learning experiences will be further analyzed and discussed. These findings contribute to a deeper understanding of how chatbot technologies can be effectively incorporated into instructional design, guiding future pedagogical innovations.

13:40-15:20 | Room 604 (6F)
Wednesday Onsite Parallel Session 3
ACE2025 | International Education
Session Chair: Michael Goh

13:40-14:05
97677 | *From Turbulence to Transformation: Young Chinese Women's Educational Mobilities and Intergenerational Family Reconfiguration*
Yu Huang, Edith Cowan University, Australia
Catriona Stevens, Edith Cowan University, Australia
Loretta Baldassar, Edith Cowan University, Australia

This research examines the turbulence experienced by Chinese young women whose international education journeys reshape intergenerational family dynamics over time. Focusing on youth mobilities that begin during formative years, we explore how early transnational experiences create ripple effects across generations, fundamentally altering family relationships and expectations as these young women transition into adulthood. Through the lens of what we call, "feminine intergenerational mobility," a term often used by participants. We analyse how youth-initiated migration creates sustained negotiations between Western individualism and Chinese family collectivism within transnational families. The study conceptualizes turbulence as both disruption and creative force, examining how young Chinese women's educational mobilities generate temporal uncertainties that persist and evolve across life course transitions—from adolescence through marriage and childbearing. The temporality of youth migration creates distinct intergenerational patterns that unfold over decades. Young women who studied abroad before age 18 develop early cross-cultural competencies that enable them to become intergenerational mediators—actively managing their parents' immigration processes, negotiating family care arrangements, and maintaining transnational connections differently than those who migrated after 18. These youth mobilities create lasting reverberations in family hierarchies, with young women often assuming adult responsibilities prematurely while simultaneously challenging traditional generational roles. Based on in-depth interviews with 16 participants across Australia and Canada, our findings reveal how youth-initiated transnational movements transform into intergenerational mobility strategies over time. Geographic contexts shape how these early mobilities impact family dynamics: established Chinese communities (Toronto and Vancouver) provide scaffolding for intergenerational adaptation, while less established Chinese community environments (Perth) intensify dependency patterns between generations.

14:05-14:30
101466 | *Rethinking Internationalization from the Margins*
Natalya Shmakova, Hokkaido University, Japan

Internationalization in higher education is often framed as a formal, top-down institutional agenda, measured through international student numbers, the diversity of their origins, global partnerships, English-medium programs, and accompanied by symbolic narratives of "global leadership" or "valuable diversity." Official discourses rarely capture the complexity of how internationalization is enacted, experienced, or resisted in institutional margins, spaces that fall outside of strategic plans, promotional narratives, or central internationalization units. This presentation proposes marginal spaces as a conceptual lens for examining how internationalization operates outside the institutional spotlight. These include areas where international students navigate their conflicting positions as recipients, instruments, and agents of internationalization, including general administrative offices, regular classrooms, peer interactions and structurally ambiguous positions of hybrid staff at the department level that bridge academic and administrative functions. Drawing on critical internationalization literature and the author's experience as hybrid staff supporting students navigating institutional complexities, this presentation argues that marginal spaces are central to understanding the limits, contradictions, and everyday negotiations of internationalization as lived practice. It highlights how belonging, recognition, and participation are unevenly distributed across institutional domains. Bringing attention to these overlooked dynamics is crucial for moving beyond top-down, programmatic models of internationalization and toward more inclusive, contextually grounded institutional approaches.

14:30-14:55
97265 | *Exploring Student Needs for Overseas Programs Through Collaboration with International Exchange Partnerships*
Rodger Williamson, The University of Kitakyushu, Japan

This presentation examines the evolving challenges and opportunities in study abroad programs by focusing on the collaboration between the University of Kitakyushu and its international partners, particularly in Ireland. Drawing on recent interviews and fieldwork, the session presents real-world insights into the cultural and administrative barriers Japanese students might face including housing difficulties, fragmented institutional support and cross-cultural challenges. Through a case study of the Galway–Kitakyushu partnership, participants can explore student and staff experiences to identify comparable challenges within their own contexts. One aim is to explore strategies for improving intercultural support systems and fostering more effective cross-departmental and inter-institutional communication in this post-COVID academic environment. The overall goal is to conclude with a synthesis of shared insights and recommendations, inviting participants to contribute to a growing network of educators committed to sustainable, student-centered global learning.

14:55-15:20
96517 | *Cultivating Global Citizens: Cultural Intelligence as a Tool for Transformative International Education Exchange*
Michael Goh, University of Minnesota, United States

In pursuit of global citizenship and educating for peace, the Bolashak International Scholarship is Kazakhstan's flagship initiative for sending its most promising citizens abroad to pursue higher education and professional development. The program's objective is to cultivate a cadre of highly qualified specialists who can contribute to the nation's development. However, the success of such international exchange programs hinges not only on academic and professional excellence but also on the intercultural adaptability of their scholars. Drawing from my university's experience as host institution and my role as faculty mentor, I will highlight how intercultural competence frameworks, particularly Cultural Intelligence (CQ), provide essential tools to design effective pre-departure, in-country, and reentry programming that support the holistic development of international scholars. CQ—defined as the capability to function effectively across cultural contexts—encompasses motivation, knowledge, strategy, and skill dimensions. In pre-departure programming CQ prepares scholars to recognize and navigate cultural differences, manage expectations, and mitigate culture shock. During the in-country experience, CQ fosters deeper engagement with host cultures, promote conflict resolution, enhances professional collaboration, and critically considers how what is practiced in one country may be adapted to their home country. Upon reentry, CQ guides scholars in reflecting on their cross-cultural experiences, reintegrating into their home cultures, and translating global competencies into local impact. By embedding CQ into international exchange we are fostering greater adaptability, resilience, and global leadership. This is particularly critical for cultivating global citizens who can bridge cultural divides and contribute meaningfully to intercultural, international, and interdisciplinary cooperation.

13:40-15:20 | Room 605 (6F)
Wednesday Onsite Parallel Session 3
ACE2025 | Educational Policy, Leadership, Management and Administration
Session Chair: Annie Abonita

13:40-14:05
101314 | *Reimagining Critical Thinking Development: A Teacher Perspective on Alternative Approaches to Hong Kong's Education System*
Cheuk Yan Leung, Soka University, Japan

This research investigates the relationship between national identity formation, educational autonomy, and critical thinking pedagogy in Hong Kong's education system after the 1997 handover. It focuses on how the 2010 introduction of Moral and National Education (MNE) exposed tensions between nationalist agendas and local identity preservation. Drawing on qualitative analysis of educator perspectives, the study examines how sociopolitical pressures influence the cultivation of critical thinking skills. Key challenges include the absence of consensus on what constitutes critical thinking, the dominance of an examination-oriented culture, and the impact of political sensitivities on classroom discourse. Analysis of the Hong Kong Diploma of Secondary Education (HKDSE) framework and subsequent reforms highlights how institutional structures shape teachers' capacity to foster independent thought. The 2014 Anti-National Education movement is identified as a watershed moment, reinforcing the importance of teacher autonomy and academic freedom in nurturing critical thinking. The findings reveal that despite reforms intended to promote critical thinking, examination pressures, political constraints, and limited professional autonomy continue to hinder effective practice. This study contributes to understanding critical thinking education within politically complex environments, showing how nationalism and localism jointly shape pedagogy. It concludes by proposing an innovative framework to strengthen critical thinking instruction in Hong Kong, offering practical insights for educational policy and institutions operating under similar sociopolitical constraints.

14:05-14:30
97669 | *Beyond Satisfaction: A Three-Year Trend Analysis of Service Quality at a Philippine Higher Education Institution*
Kimberly Joy Alcaraz, Lyceum of the Philippines University, Philippines
Keirl Patrick Olaso, Lyceum of the Philippines University-Cavite, Philippines
Roy Ferolino, Lyceum of the Philippines University-Cavite, Philippines
Joshua Caldito, Lyceum of the Philippines University-Cavite, Philippines

This study examines the three-year trend in customer satisfaction at Lyceum of the Philippines University-Cavite (LPU-Cavite), as measured through the institution's Customer Satisfaction Survey (CSS) from Academic Years 2022–2023 to 2024–2025. Acknowledging the growing importance of customer satisfaction as a key performance indicator in higher education institutions (HEIs), the university has adopted a data-driven approach to evaluating and enhancing the quality of its service delivery. Employing a quantitative research design, the study analyzed consolidated monthly CSS data collected from various service units. The survey focused on four core dimensions of service quality: politeness, courtesy, clarity, and promptness. Results reveal a consistent trend of high satisfaction ratings across all dimensions, reflecting the institution's sustained commitment to quality assurance and stakeholder engagement. These findings affirm the university's ongoing efforts to promote a responsive and student-centered service culture. Moreover, the study provides valuable insights for institutional leaders in identifying strengths, monitoring performance, and crafting targeted interventions for continuous improvement. The results underscore the importance of aligning administrative services with stakeholder expectations to ensure an enhanced customer experience in a competitive higher education landscape.

14:30-14:55
101131 | *Deconstructing Positivist Education: A Critical Pedagogical Examination of Outcome-Based Teaching and Learning in Hong Kong Universities*
Anthony Kueppers, Hong Kong Baptist University, Hong Kong
Yiwei Li, Beijing Normal-Hong Kong Baptist University, China

This paper critically examines whether outcome-based teaching and learning (OBTL) truly creates student-centered education in Hong Kong universities. Through the lens of critical pedagogies, particularly Giroux's critique of educational positivism and Paredes-Canilao's work on Asian critical pedagogies, we challenge OBTL's promise of student empowerment. Analyzing institutional materials from three major Hong Kong universities, including marketing documents, policy statements, curricula, syllabi, and assessment frameworks, our research reveals how OBTL's positivistic approach maintains rather than disrupts traditional educational power dynamics. We demonstrate that despite claims of promoting student participation, OBTL primarily serves neoliberal educational models by emphasizing measurable outcomes over genuine student agency. Our analysis shows that OBTL privileges intended learning outcomes while neglecting unintended learning opportunities. While OBTL's supposed transparency is marketed as student-centered, we find this transparency often exists only in documents rather than classroom practice, functioning more as a mechanism of neoliberal hyper-accountability than authentic student empowerment. The study reveals how OBTL's marketing as student-centered masks its role in maintaining existing power structures and educational inequities, evident in how universities craft institutional documents that privilege quantifiable outcomes. Drawing on Western and Asian critical pedagogical perspectives, this research contributes to discussions about higher education commodification and tensions between neoliberal models and authentic student-centered learning. We conclude by advocating for reimagining student-centered education beyond marketing rhetoric to embrace genuine critical engagement and transformative educational practices.

14:55-15:20
101128 | *From Hybrid Thinking to Outcomes: Exploring the Mediating Role of Quality Assurance in Higher Education at Lyceum of the Philippines*
Annie Abonita, Lyceum of the Philippines University, Philippines
Kimberly Joy Escaño- Alcaraz, Lyceum of the Philippines University, Philippines
Mark Irvin Celis, Lyceum of the Philippines University, Philippines

This study explores how hybrid thinking, quality assurance (QA), and learning outcomes are connected within the context of higher education at Lyceum of the Philippines University–Cavite. Hybrid thinking, which blends analytical, creative, and critical thinking, is viewed as a vital skill for student success in today's dynamic learning environment. Using a cross-sectional survey design, the study examined how hybrid thinking influences student outcomes and whether QA plays a role in this relationship. Results from Pearson correlation analysis revealed very strong positive relationships among all three variables: hybrid thinking and learning outcomes ($r = 0.982$), quality assurance and learning outcomes ($r = 0.956$), and hybrid thinking and quality assurance ($r = 0.920$), all statistically significant at $p < 0.001$. Mediation analysis further showed that QA partially mediates the relationship between hybrid thinking and learning outcomes, contributing 32.1% of the total effect, with a strong direct influence remaining at 67.9%. These findings highlight the importance of combining innovative cognitive approaches with well-structured QA systems to support meaningful and measurable student success. The study offers useful insights for educators and decision-makers aiming to strengthen teaching and learning practices in higher education.

13:40-15:20 | Room 607 (6F)
Wednesday Onsite Parallel Session 3
ACE2025 | Education, Sustainability and Society
Session Chair: Amel Eid

13:40-14:05
No presentation

14:05-14:30
100834 | *Aligning Community Service with Global Goals: A Case Study on NSTP and SDG Integration in a Philippine Higher Education Institution*
Diosa Marie Bayabos, Cebu Institute of Technology University, Philippines
Jean Louben Ledesma, Cebu Institute of Technology University, Philippines
Camille Baculi, Cebu Institute of Technology University, Philippines
Elcasmer Acedo, Cebu Institute of Technology University, Philippines
Deal Demetillo, Cebu Institute of Technology University, Philippines
Luni Villacastin, Cebu Institute of Technology University, Philippines

This research investigates the alignment of the United Nations Sustainable Development Goals (UN SDGs) within the National Service Training Program (NSTP) at Cebu Institute of Technology–University. Using Transformational Leadership Theory and Experiential Learning Theory as a structure, a mixed methods research design was employed using surveys of 100 NSTP students, semi-structured interviews with 9 students, and examination of 48 project records and archives. The results show students reported high awareness (89%) of UN SDGs but lower awareness of the university's action on the SDGs (mean score for university action: 4.21 vs. 4.40). Results from the project content analyzed, showed 41.67% was dedicated to education and gender equality (SDGs 4 and 5), followed by socio-economic (35.42%), environmental (14.58%) and health (8.33%). Students identified growth in leadership, their confidence, and civic responsibility; reflecting the transformative and experiential nature of the NSTP program. The study identified NSTP has a space to strengthen commitment to the UN SDGs and nurtured socially engaged student leaders. However, the study reiterated the need for further support from the university and for better communication of SDG commitments to facilitate practical shifts. Improvements to this platform will support the alignment of theory and practice, and further positions students to act as agents of sustainable change.

14:30-14:55
98128 | *Challenges Faced by Displaced Public School Teachers Following the 2021 Military Coup in Myanmar*
Kam Lyan Htan, Ankara University, Turkey

The 2021 military coup in Myanmar has caused a profound crisis in all sectors, especially public education. Teachers, particularly those in the Department of Basic Education (DBE), have faced severe repercussions for opposing the coup. One-third of the teaching workforce joined the Civil Disobedience Movement (CDM), risking their careers, facing unjust arrests, and enduring imprisonment. Many have been forced into exile, seeking refuge in countries like Thailand and Malaysia. This study aimed to explore the challenges faced by displaced public school teachers who resisted the military junta. A qualitative, phenomenological approach was used, with 12 former teachers (7 female, 5 male) interviewed through semi-structured in-depth interviews. The participants were selected using snowball and purposive sampling methods. Thematic analysis, aided by MAXQDA software, was employed to analyze the data. The results revealed that the military coup deeply impacted teachers, leading to systematic oppression such as job dismissals and the inability to work in their field. Many teachers faced isolation, and some were tortured, arrested, or killed. Others fled the country to become refugees. The study also explored the ethical dilemma teachers faced—whether to continue working under the junta or resist and join the opposition movement. This research emphasizes the importance of supporting displaced teachers and students in continuing their education and calls for international and regional assistance to help Myanmar's education community during the ongoing crisis.

14:55-15:20
96266 | *Carrying Home Within: Mental Health Education for Displaced Lives*
Amel Eid, National Chiao Tung University, Taiwan

As someone who has worked closely with Palestinian refugees—listening to their stories, walking with them through trauma, and witnessing their strength—I've seen how traditional mental health models often fall short. These models, shaped by Western frameworks, don't always speak the language of displacement, exile, or cultural memory. This presentation shares a more human approach—one shaped by my clinical and community work with displaced individuals and families. I focus on how we can rebuild a sense of self and belonging through culturally grounded support that honors people's histories, values, and community ties. Through real stories and field experiences, I show how practices like storytelling, shared reflection, and culturally-rooted dialogue can help refugees and immigrants make meaning of their pain—and carry home within, even when home is lost. The work is based on my years of experience as a psychologist supporting Palestinian communities in Gaza and abroad, and more recently, immigrant families in Taiwan. I'll share the methods I've used, what I've learned from my clients, and how this approach can offer tools for educators, therapists, and policymakers seeking to decolonize mental health and serve communities with care and respect.

13:40-15:20 | Room 608 (6F)

Wednesday Onsite Parallel Session 3

ACE2025 | Educational Policy, Leadership, Management and Administration

Session Chair: Ingrid Robinson

13:40-14:05
101205 | *Conceptualizing Joy as School Leaders*
Ken MacKinnon, University of Prince Edward Island, Canada

In a time when school leaders are struggling to meet the increasingly complex demands of their role, there is a need to explore the presence of joy within their work. When this author was principal, joy was elusive and felt unattainable and yet was continually sought after as a means of finding and making meaning within the work. Joy is conceptualized in many ways and is often ill defined; it is often defined through emotion, mood, or spiritual inspiration (Johnson, 2019); as a personal expression (Garrido, 2022); as a conscious choice (Winwood and Bhansali, 2022); and as part of one's core identity (Van Capellen, 2020). This study makes the case for the existence of joy as part of school leadership. Interviews and focus groups with principals and vice principals in Canada have shed light on how school leaders define and understand joy in their work. The findings demonstrate that joy is ultimately created and sustained relationally rather than in any individual way. This research informs policies around how school leaders are supported and recruited.

14:05-14:30
97456 | *Why Education Reform Fails: Interest Group Power and the Politics of Teacher Policy in Indonesia*
Richard Kuhon, University College London, United Kingdom

Following political decentralisation in the late 1990s, Indonesia introduced a flurry of education reforms, beginning with the 2003 Education Law and followed by the 2005 Teacher Law—both aimed at improving education outcomes. Yet, despite these efforts and substantial public investment, the country continues to face persistent low education quality, especially concerning teacher competence and student performance. This paper investigates why education reforms have failed to yield substantial improvements, focusing specifically on the political and institutional obstacles to implementing teacher policies. While previous studies have documented the technical shortcomings of reform or attributed failure to capacity deficits, few have examined its political dimensions. This paper addresses that gap by applying the historical institutionalism approach and interest group theory to analyse the interplay between Indonesia's decentralised governance, partisan politics, and educational interest groups. Drawing on qualitative data from interviews, legislative records, and policy documents, the study reveals how political dynamics shape and constrain the policymaking process, policy choices, and outcomes. The findings contribute to our understanding of the politics of education in post-authoritarian contexts, particularly where vested interests are deeply embedded in the political system.

14:30-14:55
100994 | *Innovative Learning Management Model to Create Learning Spaces for Elementary School Students*
Nopporn Chantaranamchoo, Silpakorn University, Thailand
Tippawan Sukjairungwattana, Silpakorn University, Thailand
Saranya Chanchusakun, Silpakorn University, Thailand

Learning spaces play a crucial role in promoting equity in learning and providing opportunities for all learners. This research aims to examine the learning space model and develop guidelines for utilizing an innovative learning management model to create learning spaces for primary school students in the lower central region of Thailand. The study involved 40 key informants, including school administrators, teachers from best-practice schools, and educational academics, with data collected through in-depth interviews and focus group discussions. Qualitative data were analyzed using thematic and content analysis. The findings indicate that the learning space model comprises: (1) active, learner-centered learning management that integrates multiple disciplines and employs project-based approaches; (2) learning management innovations in curriculum, instruction, educational technology, and school administration; (3) learning spaces both within and beyond educational institutions; and (4) learning outcomes that enhance educational opportunities and develop learners' skills. Guidelines for implementing the model emphasize the integration of learning management, learning innovation, and learning spaces, with a recommendation for educational institutions to incorporate technology and environments that foster creative learning engagement.

14:55-15:20
92886 | *A Consideration of Canadian School Administrators' Views About and Influence upon Health Education*
Daniel Robinson, St. Francis Xavier University, Canada
Lauren Sulz, University of Alberta, Canada
Hayley Morrison, University of Alberta, Canada
Mickey Jutras, St. Francis Xavier University, Canada
Ingrid Robinson, St. Francis Xavier University, Canada

This study examined Canadian school administrators' views about and influence upon the delivery of health education in their schools. The research questions framing this inquiry included the following: (a) "How are school-site decisions made about who teaches health education," (b) "How much curriculum time is being devoted to health education," and (c) "What are the factors that influence the delivery of health education?" Responding to a survey that included 51 questions/prompts, 19 participants provided important information and insights about the delivery of health education. Among the most important of these findings were the following: administrators did not prioritize allocating qualified teachers to teach health education; although the majority of participants reported that their schools were achieving recommended/mandated instructional minutes for health education, the approaches utilized to achieve this suggest a devaluing of the subject; and the lack of prioritization at a system level was identified as a barrier to the delivery of quality health education. These findings and the discussion of them should be of immediate interest to researchers and practitioners who engage with health education champions and/or school-site and system administrators.

Notes

13:40-15:20 | Room 702 (7F)

Wednesday Onsite Parallel Session 3

ACE2025 | Mind, Brain and Psychology

Session Chair: Ivy Morino

13:40-14:05

96061 | *Resilience and Cognitive-emotional Development Through Positive Psychology in India: A Cultural and Educational Perspective*
Ahaha Lahiri, CHRIST (Deemed to be University), India

This paper examines how Positive Psychology, within the cultural context of India, facilitates emotional and cognitive development as key mechanisms for resilience and well-being in educational and community settings. While global discourse often frames well-being in terms of subjective or emotional health, emerging literature emphasizes the importance of integrating both hedonic and eudaimonic dimensions to holistically understand mental health outcomes. Drawing on interventions across Indian schools, universities and therapeutic contexts, including yogic practices and reflective writing, and culturally rooted group activities like satsang, this study demonstrates how positive psychology interventions foster self-regulation, emotional intelligence, and meaning making. These interventions not only improve subjective well-being but also contribute to long term cognitive flexibility, social adaptation and psychological resilience. Further, the paper explores how emotional states can influence neurocognitive outcomes, with studies suggesting links between positive affect and the development of personal and social resources. Spiritual practices and indigenous belief systems, such as meditation and devotional rituals, serve as both coping mechanisms and developmental pathways, offering culturally valid means of cultivating emotional balance and cognitive engagement. The paper also identifies gaps in current Indian research, particularly around the neural correlates of well-being, culturally appropriate cognitive indicators, and underrepresented rural perspectives. By emphasizing culturally congruent psychological frameworks and their implications for education and youth development, this paper contributes to a deeper understanding of the mind-brain behavior nexus in diverse learning contexts.

14:05-14:30

97428 | *Personal Growth Initiative and Mental Health in Chinese Vocational Students*
Yang Cui, Beijing Normal University, China
Yun Wang, Beijing Normal University, China
Hongyun Liu, Beijing Normal University, China
Fumei Chen, Beijing Normal University, China
Cai Zhang, Beijing Normal University, China
Li Ke, Beijing Normal University, China

This study explores the associations between personal growth initiative (PGI), depression, and subjective well-being among Chinese secondary vocational students, and examines the moderating role of school climate, with a specific focus on the career development dimension. Utilizing a nationally sample of approximately 8,000 students from vocational schools across China, we conducted structural equation modeling to investigate the direct effects of PGI on mental health outcomes and the potential buffering effects of a supportive school environment. Results indicate that higher levels of PGI are significantly associated with lower depression and greater subjective well-being, highlighting PGI as a protective personal resource in the vocational education context. Furthermore, school climate plays a critical moderating role: students with high PGI experience better mental health outcomes particularly in environments that emphasize career development support, such as access to career counseling, skill-building opportunities, and future-oriented guidance. Among the various dimensions of school climate assessed, the career development climate demonstrated the strongest moderating effect, amplifying the positive impact of PGI and mitigating its limitations in less supportive contexts. These findings underscore the importance of fostering both individual-level growth capacities and school-level career-oriented support to promote the psychological well-being of vocational students. Implications for educational policy and school-based mental health interventions are discussed.

14:30-14:55

101415 | *The CBF Model: A FiveMinute Classroom Routine to Support Students' SocialEmotional Learning, Cognitive Readiness and WellBeing*
Hamdah Jibar Alhashmi, Emirates College for Advanced Education, United Arab Emirates
Claudine Habak, Emirates College for Advanced Education, United Arab Emirates
Joseph Agbenyega, Emirates College for Advanced Education, United Arab Emirates

Recent data indicate that stress-related behaviors among adolescents are on the rise (American Psychological Association, 2020; Centers for Disease Control and Prevention, 2022). Such stress often manifests as emotional outbursts, anxiety, and difficulties adjusting to social and academic routines, potentially disrupting healthy development and academic learning. In response, this paper introduces the CONNECT, BREATHE, FLOURISH (CBF) framework, a concise, five-minute daily practice designed to fortify both emotional resilience and cognitive engagement through early childhood, k-12 settings, and adolscents. Grounded in Social-Emotional Learning (SEL), the CONNECT component dedicates three minutes to structured social bonding, enabling children to share simple experiences and practice empathy. By contrast, BREATHE, informed by Mindfulness Theory, involves two minutes of guided breathing exercises that support self-regulation and bolster focused attention. Rather than serving as a separate technique, FLOURISH, inspired by Positive Psychology and Self-Determination Theory, encapsulates the cumulative benefits, such as improved classroom engagement, emotional stability, and a stronger sense of belonging, that emerge when children's relational and regulatory needs are met. The proposed framework requires minimal resources and can be seamlessly integrated into existing schedules, such as morning circle time, with only brief educator training necessary for implementation. This paper outlines practical recommendations for adapting CBF to diverse cultural contexts, discusses preliminary indicators of its effectiveness, and explores policy implications for broader adoption. By targeting key facets of wellbeing and attention, the CBF framework offers an accessible, evidence-based approach that supports children's holistic development and lays a foundation for enduring academic and social success.

13:40-15:20 | Room 702 (7F)

Wednesday Onsite Parallel Session 3

ACE2025 | Mind, Brain and Psychology

Session Chair: Ivy Morino

14:55-15:20

97914 | *Evaluating Dialectical Behavior Therapy Skills Training in Improving the Mental Health of Distressed College Students*

Ivy Moriño, Central Bicol State University of Agriculture; Ateneo de Naga University, Philippines

This study evaluated the effectiveness of a brief Dialectical Behavior Therapy-Skills Training intervention designed to improve the mental health of distressed college students aged 18 and older. A mixed-methods research, combining quantitative and qualitative analyses, provided a comprehensive understanding of distress mitigation strategies. The quantitative part assessed the differences in mental health outcomes between the experimental and control groups. Furthermore, the pretest and posttest scores of the experimental group were compared. The IGM-Across the Continuum Scale: A Mental Health Screening Tool was utilized to determine the respondent's mental health states. After the intervention, ten participants were purposively chosen for interviews to explore the factors that facilitate or hinder the improvement of the mental health status of students in distress. Results from the quantitative part showed a significant improvement in the experimental group, and no significant difference in the mental health state was found in the control group. This implies the effectiveness of DBT-ST in enhancing mental health. The findings of the qualitative study identified key themes, including receptivity to various ways of handling distress, the creation of safe spaces, fostering an inclusive climate, and the deliberate practice of acquired skills. Conversely, social shame and co-occurring personal concerns were factors that hindered progress. The study recommends integrating DBT-ST programs into institutional mental health curricula, with a focus on providing tailored interventions and fostering a supportive campus atmosphere. Future research could explore the long-term effects of DBT-ST, contributing to a proactive mental health framework for college students.

13:40-15:20 | Room 703 (7F)
Wednesday Onsite Parallel Session 3
ACE2025 | Professional Training, Development and Concerns in Education
Session Chair: Jennifer Robinson

13:40-14:05
100730 | *3P'S Model of an Effective Science Teacher*
Collenn Callanga, University of the Philippines Cebu, Philippines
Jonavie Becbec, Cebu Normal University, Philippines

The role of science teachers is paramount in shaping scientifically literate students, making it essential to identify the factors that contribute to teacher effectiveness. This study explored the attributes, characteristics, and practices that distinguish effective science teachers in Philippine public secondary schools. Using a qualitative exploratory design, in-depth interviews were conducted with ten science teachers who were identified as effective based on their appraisal rating (3.500–5.000) in the Results-Based Performance Management System over the last three consecutive years. Data were analyzed using Braun and Clarke's (2006) thematic analysis framework and coding procedures were done through free version of NVivo 14 to generate insights into personal, professional, and classroom practices. The teacher participants are interviewed based on how they describe an effective science teacher with an introspection on their qualities, characteristics, classroom strategies, and other personal and professional attributes that contribute to them becoming an effective science teacher. Findings led to the development of the 3P's Model of an Effective Science Teacher, which integrates three interconnected dimensions: the teacher as a Person, as a Profession, and in Practice. Each dimension and its associated attributes must be imbued in those who teach science to truly achieve effectiveness. Unlike existing frameworks, the 3P's Model contextualizes effectiveness within the realities of Philippine secondary schools and offers a practical lens for teacher education and professional development. While the model presents a promising framework, its validation is limited to a small exploratory sample. Future research is recommended involving quantitative testing to establish its reliability and generalizability.

14:05-14:30
101149 | *Cultivating Teachers' Design Thinking Mindset via a Knowledge Building–Based Professional Development Program*
Chih-Hsuan Chang, National Chengchi University, Taiwan
Guo-Tsai Hung, National Taichung University of Science and Technology, Taiwan
Huang-Yao Hong, National Chengchi University, Taiwan
Tsung-Liang Tsai, Taipei Medical University, Taiwan
Wen-Lung Huang, Fo Guang University, Taiwan

In the era of artificial intelligence, educators must continually develop their 21st-century digital competences. Among these, design thinking (DT) has emerged as a crucial skill for addressing complex challenges with creativity, problem-solving, and innovation. However, integrating DT into teacher professional development and cultivating a DT mindset remain difficult.
This study evaluated a 10-week online Knowledge Building Professional Development (KB-PD) program involving 48 teachers in collaborative STEAM lesson design. The program was designed using the Knowledge Building Design (KBD) model, which adopts Knowledge Building (KB) as a foundation for fostering collaborative, inquiry-driven environments essential to cultivating a DT mindset. Three instruments were employed to assess KBD implementation: perception of KB principles (KBP), perception of KB environment (KBE), and DT mindsets (DTM). Statistical analyses included: (1) paired-samples t-tests to evaluate pre-post changes, (2) Pearson correlations to examine construct interrelationships, and (3) multiple regression to assess the predictive capacity of KBE and KBP on DTM.
Teachers showed significant gains in KBP and KBE, which provided a collaborative, inquiry-based context for DT. DTM also improved significantly across all dimensions. Beyond these improvements, strong correlations were found among DTM, KBP, and KBE. Regression analysis revealed both KBP and KBE significantly predicted DTM, explaining 53% of its variance ($R^2 = .53$, $F = 25.16$, $p < .001$), with KBP showing slightly stronger predictive power than KBE. In conclusion, this study demonstrates the effectiveness of the KBD model in embedding DT within teacher professional development and highlights a viable pathway for preparing educators in the AI era.

14:30-14:55
98524 | *A Comparative Analysis of Filipino Teachers' Conceptions on High-Quality Assessment Across Demographic and Professional Profiles*
Joan Rural, Polytechnic University of the Philippines, Philippines

This study examined Filipino teachers' conceptions of high-quality assessment across demographic and professional profiles. Grounded in Constructivism, Teacher Beliefs Theory, and Theories of Assessment Quality, the research explored how teachers' perceptions align with key assessment dimensions: validity, reliability, practicality and efficiency, authenticity, fairness, ethics, and positive consequences. A descriptive-comparative design was employed, with data gathered from 408 teachers through a validated, researcher-developed questionnaire. Stratified random sampling ensured representative distribution, and internal consistency was verified via Cronbach's Alpha. Data were analyzed using descriptive statistics and the Kruskal-Wallis test to assess group differences across six profile variables. Findings revealed uniformly high levels of agreement across all seven dimensions, indicating a shared understanding of high-quality assessment. Teachers, in particular, valued fairness and ethics, emphasizing inclusivity, confidentiality, and professional integrity. Despite diverse demographic and professional characteristics, including age, sex, civil status, educational attainment, years of service, and academic rank, no statistically significant differences were found in conceptions of assessment quality. Effect sizes were minimal, reinforcing the homogeneity of perceptions. The study concludes that Filipino teachers possess a cohesive and well-informed view of quality assessment, which is likely shaped by professional standards and institutional training rather than their personal background. These findings affirm the effectiveness of standardized professional development and have implications for policy-making, suggesting strong potential for unified reform in assessment practices nationwide.

13:40-15:20 | Room 703 (7F)

Wednesday Onsite Parallel Session 3

ACE2025 | Professional Training, Development and Concerns in Education

Session Chair: Jennifer Robinson

14:55-15:20

100668 | *Exploring the Lesson Study Experiences of Mathematics Teacher Educators in Higher Education: Processes and Challenges*

Jennifer Robinson, Emirates College for Advanced Education, United Arab Emirates
Evrim Erbilgin, Emirates College for Advanced Education, United Arab Emirates
Jason Johnson, Emirates College for Advanced Education, United Arab Emirates
Reem Hashem, Emirates College for Advanced Education, United Arab Emirates
Serigne Gningue, Emirates College for Advanced Education, United Arab Emirates

Originating in Japan, lesson study is an educator-led professional development method that engages a group of educators, working collaboratively in a cyclical process of lesson planning, teaching, reflecting, and revising. In lesson study, the educators identify pedagogic challenges that they seek to focus on and improve their practice in. For this study, situated in a college of education in the United Arab Emirates, the pedagogic challenges were increasing student understanding of conceptual knowledge in mathematics, ethical use of AI in teaching and learning, and best practice in the virtual classroom context. Participants included five higher education instructors and 36 students in two pre-service teacher courses. Data collection included recording all meetings in the study and lesson planning phases, student work in research lessons, lesson-observation field notes, student interviews after the research lessons, and written reflections by instructors at the end of the lesson study cycle. Analysis of meeting transcripts and reflections utilised a thematic analysis approach with a collaborative coding focus to ensure validity. This presentation will focus on the reflections from the higher education instructors and their perceptions of the processes used to build their expertise in the context of lesson study; their changes in knowledge, beliefs, and practices as a result of collaboration in lesson study; and the challenges they encountered in implementing lesson study in higher education settings.

13:40-15:20 | Room 704 (7F)
Wednesday Onsite Parallel Session 3
ACE2025 | Adult, Lifelong and Distance Learning
Session Chair: Santos Jose III Dacanay

13:40-14:05
97271 | *Klongsan MAKE: Building Making Habits Through Community-Driven Action Learning for STEAM Education*
Pronyos Chattarakul, King Mongkut's University of Technology Thonburi, Thailand
Pote Nilsa-ard, King Mongkut's University of Technology Thonburi, Thailand
Arunothai Sarigakham, King Mongkut's University of Technology Thonburi, Thailand

This research explores the mechanisms driving hands-on learning in science, technology, engineering, arts, and mathematics (STEAM) by examining the long-term development of "Klongsan MAKE", a co-created initiative in the Klongsan district of Bangkok. Over the past decade, observations of university design students revealed a critical gap in making skills, which limited their conceptual grasp of STEAM. A follow-up investigation involving 12 schools in Klongsan highlighted that formal education often lacks tangible, hands-on components essential to reinforcing STEAM concepts. Klongsan MAKE bridges this gap through a collaborative model linking schools, maker spaces, and communities. It acts as both a learning framework and an evaluative tool to analyze the formation of making habits in young learners. Key components include shared tools, volunteer makers, accessible materials, and a localized support network. The study identifies the conditions for successful implementation and sustainability, emphasizing the interdependence between schools, community shops, and external partners such as FabLab Bangkok and KX. The project's impact is twofold: it not only enables students to physically test and deepen their understanding of STEAM theories, but it also inspires educators and local stakeholders to embrace hands-on learning as a core pedagogical strategy. By merging informal and formal educational pathways, Klongsan MAKE cultivates a visible "Maker Society", shifting mindsets from passive knowledge reception to active exploration and co-creation. This model offers a replicable blueprint for embedding STEAM learning in local educational ecosystems.

14:05-14:30
100815 | *Beyond Breakout Rooms: Strategies for Sustaining Motivation in Zoom-Based TESOL Training for Second-Career Adults*
Nhan Vu, Edith Cowan University, Australia

This proposal addresses the critical challenge of sustaining motivation among adult learners in online professional development, a factor essential for the success of second-career training. This paper presents a case study of a synchronous, Zoom-based TESOL program for 10 Vietnamese professionals, aged 21 to 40, transitioning from diverse fields. The study investigates pedagogical strategies aimed at enhancing motivation and combating "Zoom fatigue." The program's design was developed and implemented by a TESOL educator with experience in online adult learning, who also conducted this research. Moving beyond standard features like breakout rooms, this research evaluates a multi-faceted approach. Key strategies include using structured deep-dialogue sessions to foster meaningful conversations, gamified lesson components, and structured peer-led micro-teaching sessions. The effectiveness of these interventions was measured using a qualitative approach through semi-structured interviews. Data were collected from participants both before and after the implementation of these strategies to explore their lived experiences and assess changes in their engagement and motivation. The findings indicate that a targeted, multi-faceted approach is essential for maintaining motivation and persistence among adult learners. The paper concludes with practical implications for other TESOL trainers working with career-change professionals in a remote context, offering specific, actionable strategies for fostering deep and sustained engagement.

14:30-14:55
101293 | *Exploring Learner Agency and Progression in a Data Literacy Programme for Working Adults*
Yoanna Arlina Kurnianingsih, National University of Singapore, Singapore
Alastair Owen Pearl, National University of Singapore, Singapore
Yiqun Liu, National University of Singapore, Singapore
Geraldine Ju Hui Ang, National University of Singapore, Singapore

In Singapore, workforce transformation and lifelong learning have become national priorities under initiatives such as the SkillsFuture movement, which promotes stackable, skills-based, and industry-aligned upskilling. In light of this agenda, it is important to understand what drives learners to continue beyond mandatory training and how they navigate non-mandatory learning pathways. Drawing on the Data Literacy Programme (DLP) at the National University of Singapore, this study investigates how participants in workplace training make decisions about progression and engagement. Our study found that gender, age, marital status, and job level do not significantly predict a learner's pathway into and through the non-mandatory courses ($n=298$, $p>0.05$). In contrast, course sequencing appeared to be influenced by foundational course performance and educational background ($p<0.05$). These findings suggest that factors such as personal interest, motivation, and perceived self-efficacy take precedence. While only 7% of learners continued into a non-mandatory course, 35% of those progressed further. This pattern may reflect a self-selection mechanism, where learners who perceive strong alignment with course content are more likely to continue. In this sense, the first non-mandatory course may serve as a threshold for confirming perceived value and personal fit. Follow-up interviews support that decisions to continue are shaped by perceived workplace relevance and personal interest alignment. These findings highlight that continued engagement is influenced by mouldable factors (such as perceived value, confidence, and motivation) over fixed traits. We discuss how institutions can better design interventions and scaffolds that support learner agency and promote progression through stackable learning pathways.

14:55-15:20
101406 | *Micro-credential Policy and the Philippine Experience*
Santos Jose III Dacanay, University of the Philippines Baguio, Philippines

In the last decade and particularly during the Covid pandemic, there has been a surge of micro-credential offerings in the Philippines and elsewhere, from short training courses to certification and non-degree programs. The Philippines' Commission on Higher Education and Technical Education and Skills Development Authority issued policy guidelines on micro-credential development, accreditation, recognition and regulation. Classes of micro-credential providers such as higher education and technical-vocational training institutions, professional and industry associations, and private companies, nonprofits and internationally-renown providers face regulatory challenges and compliance dilemma. Policy requires that micro-credentials fall under levels 5 to 8 of the Philippine Qualifications Framework, which has been aligned with the ASEAN Qualifications Reference Framework, that raise issues on the accounted volume of learning, their standalone value, assessment, and quality assurance standards. International and country experiences on micro-credentials showcase the most promising practices, best practices and practices of the rest, that provide benchmarks for adoption and learning. The paper recognizes that both degree and non-degree education have purpose in the pursuit of lifelong learning and encourages micro-credential providers within the learning ecosystem to find opportunities for the two to coexist meaningfully. The research presents opportunities for adult learners, full-time employees and gig workers in terms of stackable credentials, academic certificates, professional certificates and licenses, digital badges and nano-credentials, with due consideration of their entire career spectrum and lifelong learning.

13:40-15:20 | Room 705 (7F)
Wednesday Onsite Parallel Session 3
ACE2025 | Curriculum Design, Counselling and Adjustments in Education
Session Chair: Xiaopeng Gong

13:40-14:05
96403 | *"Am I Worthy?":The Role of Childhood Adversity, Self-Esteem, and Self-Compassion in the Mental Health of People with Invisible Disabilities*
Yi-Hsuan Liu, National Taiwan Normal University, Taiwan
Yun Chang, Taipei Municipal Jinhua Junior High School, Taiwan

Individuals with invisible disabilities—such as autism spectrum disorder, emotional and behavioral disorders, and learning disabilities—are disproportionately affected by mental health challenges compared to those with visible disabilities (Liu & Wang, 2021). However, the psychological mechanisms underlying this disparity remain insufficiently understood. To address this gap, this study aims to investigate the factors influencing the mental health of individuals with invisible disabilities by examining the roles of adverse childhood experiences, self-esteem, and self-compassion. This mixed-methods study examined the roles of adverse childhood experiences (ACEs), self-esteem, and self-compassion in individuals with invisible disabilities. A total of 150 participants were recruited and completed a questionnaire containing three measurement scales. An independent sample t-test, ANOVA, and mediation analysis were performed using SPSS 29.0 and AMOS 28.0. Additionally, 10 participants took part in semi-structured interviews. Qualitative data were analyzed using content analysis. Quantitative findings showed that this group reported more adverse childhood experiences (ACEs) and lower levels of self-esteem and self-compassion than previously documented in general and disabled populations. Individuals with experiences of being subjected to violence had significantly lower self-esteem. Self-esteem also significantly mediated the relationship between ACEs and self-compassion. Qualitative themes included shame and diminished self-worth rooted in childhood adversity, difficulties in self-expression due to social misperceptions, and struggles with self-acceptance. Some participants viewed their disability as traumatic, though gaining insight into their condition facilitated the restoration of self-esteem.

14:05-14:30
96705 | *The Role of Identity-based Curriculum in Social-Emotional Learning*
Ei Smith, Phillips Academy Andover, United States

Identity is defined as a set of experiences and beliefs that make-up a sense of personhood. Markers of identity, such as gender, race and class are socially constructed and intersectional. They are influenced by self-curation, aspirations and how others perceive us. This interplay between the cultural identity of the students and hegemonic structures provides a tension that can and will play a role in classroom culture (Krzesni, 2015). I have chosen to focus on the importance of an educational program that advocates for the exploration of identity within the K-12 life stage because it is essential for young people's heritage and histories to be valued and represented. While they are growing intellectually and emotionally, this form of validation provides innumerable benefits both academically and socially. Methodologically, I have created two social science modules, at the elementary and high school levels, to demonstrate how these values can be put into practice. This paper will contribute to the growing study of identity-conscious education and how to cultivate a respectful community in an institutional setting. It will detail the facets of this curriculum and showcase how students (n=45) engaged with the scholarship, produced work and applied a critical lens at their respective developmental stages. The responsive classroom appreciates the distinctions that cosmopolitanism provides and the study of the leaders within activist movements for racial and indigenous justice, gender equality and ability rights will allow for the intentional and deliberate study of issues of power negotiation and systemic issues.

14:30-14:55
93497 | *Resilience, Mental Well-Being, and Turnover Intention Among Philippine Public-school Teachers in the Context of the COVID-19 Pandemic*
Niña Salve King-Bañas, Department of Education-Schools Division Office of Camarines Sur, Philippines
Leonor Lynette Mendoza, Ateneo de Naga University, Philippines

The study analyzed the state and factors affecting personal resilience, mental well-being, and turnover intention among public school teachers during the pandemic, and whether resilience and well-being could predict turnover intention. Using a sequential explanatory design with 384 quantitative and 12 qualitative participants, it found that teachers had normal resilience, moderate mental well-being, and low turnover intention. The results also showed that mental well-being could predict turnover intention explaining 10.9% of its variation. Key factors affecting personal resilience were self-efficacy, family support, positivity, concern for students, and adaptability. Factors affecting Mental well-being were family support, spirituality, collegial support, social distancing, and news consumption. And Factors affecting Turnover intention were heavy workload, inadequate salary, unsupportive administration, and health concerns. A recommended framework for teachers' mental wellness in schools included creating a healthy working environment, promoting professional development opportunities, fostering self-care and work-life balance, and implementing mental wellness programs. This comprehensive approach aims to support teachers in maintaining their well-being and reducing turnover intention and other factors in the education system.

14:55-15:20
101329 | *Connecting Social-Emotional Learning with K-12 Classrooms: A Story of Developing Three SEL Graduate-Level Courses for a MSED Program*
Xiaopeng Gong, Western Oregon University, United States

Social-emotional learning (SEL) refers to a series of crucial life skills such as self-awareness, self-regulation and responsive decision-making. Individuals can benefit from learning SEL skills at any given age with the premise that SEL can be continuously improved and nurtured. In the proposed presentation, the author will share a story about designing and embedding a series of SEL courses into a non-teacher licensing graduate program. These courses include educational foundations of social-emotional skills, implementing SEL into K-12 classrooms' daily practices, and teaching SEL to address crucial multicultural and equity issues. The background and regulations of SEL in K-12 classrooms in the State of Oregon, the United States will be introduced. The presentation is among the first explorations of SEL in education programs in Oregon, after the official adoption of Oregon SEL Standards in teacher preparations and K-12 schools. The development of the SEL courses, major topics involved, as well as learners' feedback will be shared and discussed.

13:40-15:20 | Room 707 (7F)
Wednesday Onsite Parallel Session 3
ACE2025 | AI in Education
Session Chair: Gerard Flynn

13:40-14:05
97275 | *Evaluating the Potential and Requirements for an AI-Powered Mobile Learning Application to Enhance Sight-Reading Skills for Percussion Among Thai Youth*
Rawipat Onpotha, Khon Kaen University, Thailand
Parama Kwangmuang, Khon Kean University, Thailand

This study aims to evaluate the potential and requirements for developing an AI-powered mobile learning application based on a constructivist approach to enhance sight-reading skills for percussion instruments among Thai youth. The research employs a mixed-methods approach, involving a sample of 120 Thai youth aged 13-18 years old who have experience in playing percussion instruments. Data collection includes an online survey on learning needs, preferences, and perceived challenges in sight-reading, as well as semi-structured interviews with 15 music teachers and 5 experts in music education and educational technology. The results indicate that 78% of the youth participants express a strong interest in using a mobile learning application to improve their sight-reading skills, with 85% preferring gamified learning features. However, 65% of the participants report challenges in accessing quality learning resources and receiving personalized feedback. The interviews reveal that 90% of the music teachers recognize the potential of AI-powered mobile learning in providing adaptive learning experiences and real-time feedback, while 80% of the experts emphasize the importance of aligning the application design with constructivist principles. The findings highlight the key requirements for the mobile learning application, including interactive notation display, real-time performance evaluation, adaptive difficulty adjustment, and gamification elements. These insights will guide the development of an AI-powered mobile learning application that effectively addresses the learning needs and preferences of Thai youth in enhancing their sight-reading skills for percussion instruments.

14:05-14:30
97318 | *Pre-service Teachers' TPACK and Their Intention in Utilizing Generative Artificial Intelligence for Teaching: Learning from Indonesia and Philippines*
Maulana Mualim, Yogyakarta State University, Indonesia
Ana Mae Monteza, University of Mindanao Digos College, Philippines

The current advancement of Generative Artificial Intelligence (GAI) technology has gradually mainstreamed AI-assisted educational transformation. Stemming from the technological pedagogical content knowledge (TPACK) framework and the theory of planned behavior (TPB), this study aims to investigate pre-service teachers' TPACK and their behavioral intention in utilizing GAI for teaching in Indonesia and the Philippines. Data were collected through online surveys completed by 400 pre-service teachers who had completed a teaching internship program. Two questionnaires on TPACK and TPB were used after ensuring their validity through expert judgment and pilot tests. The gleaned data were analyzed through structural equation modeling on SmartPLS software. The pre-service teachers' overall TPACK scored high with their TK being the highest and CK the lowest score. Their TPACK significantly affected their attitudes, perceived behavioral control, and intention in employing AI for their teaching practicum. Furthermore, while their attitudes affected their intention and perceived behavior control, and perceived behavior control affected their intention and attitudes, the subjective norms did not significantly affect their perceived behavior control and intention. These findings were further corroborated through deep interviews with selected informants.

14:30-14:55
100977 | *Development of a GPT-Based Self-Compassion Training System for Chinese International Students in Korea*
Aijin Xiao, Pusan National University, South Korea
Sang-Su Lee, Pusan National University, South Korea

This study aims to develop and evaluate a GPT-based self-compassion training system to support the emotional adaptation and well-being of Chinese international students in Korea. Grounded in Neff's (2003) self-compassion theory, Berry's (1997) acculturation model, human-computer interaction principles, and educational psychology frameworks, the system is designed to reduce self-critical thinking and enhance cultural adjustment. Using a design-based research (DBR) approach, the study first analyzes prior literature and conducts a needs assessment to determine core functions, dialogue scenarios, and prompt structures. The prototype is then implemented with ten Chinese international students to assess usability and effectiveness through qualitative and quantitative measures. Key features include recognition of self-critical language, emotion labeling and feedback, culturally contextualized self-compassion dialogues, and progress tracking. Expected outcomes include improved self-compassion, reduced negative emotions, and enhanced cultural adaptation. This research offers an innovative approach that integrates AI with psychological and educational theories, providing both theoretical and practical implications for future support systems targeting diverse international and multicultural learners.

14:55-15:20
101395 | *Infotainment in Education: Teaching Generative AI Through Narrative-Based Learning in Business Computing Applications*
Gerard Flynn, Pepperdine University, United States

This paper presents the design, implementation, and assessment of an innovative narrative-based course for teaching generative AI in an undergraduate Business Computing Applications class at Pepperdine University in Malibu, California, USA. Rather than relying on traditional step-by-step technical instruction, the course introduced students to ChatGPT and Gemini through a story-driven framework blending academic rigor with engaging "infotainment." The course consisted of 25 original videos (103 minutes total) across six chapters, paired with a 103-page workbook containing summaries, exercises, quizzes, and answer keys. The narrative followed a wealthy, eccentric technology mogul who enlists his senior director—and, by extension, the student—to conduct AI-driven research for a secret project. This approach placed learners as active participants in a plot with conflict, humor, and a surprise ending, making the acquisition of AI skills both memorable and meaningful. Assessment included graded homework submissions, a skills-based exam, and student feedback surveys. Students consistently praised the course as "engaging" and relevant to "real-life scenarios." Some even requested more assignments, underscoring the effectiveness of narrative immersion in sustaining motivation. A strong ethical component emphasized responsible AI use, contrasting with institutional restrictions that discourage such tools. Findings suggest that narrative-driven, ethically grounded instruction can enhance digital literacy, increase student engagement, and provide a scalable model for teaching emerging technologies. This paper argues that "infotainment" offers a viable alternative to traditional pedagogy in technology education.

13:40-15:20 | Room 708 (7F)
Wednesday Onsite Parallel Session 3
ACE2025 | Foreign Languages Education and Applied Linguistics
Session Chair: Wenhua Hsu

13:40-14:05
97408 | *Shifting Tongues, Shaping Selves: Language Loss and Translanguaging in Spanish-English Classrooms*
Maria Alejandra Mareco, Wilburn Elementary School, United States

The main focus of this paper is how English-only education affects home language development in US bilingual children. The study takes place in an elementary school in Raleigh, North Carolina, where nearly half of the students are Hispanic and the rest of the population is Black, Asian, multiracial, and White children. English is not the first language of the majority of the students, and thus the school is a multilingual and multicultural school. Though they have substantial cultural background, many kids exhibit early signs of subtractive bilingualism like lexical loss, grammatical simplification, and decreased verbal fluency in Spanish (Lambert, 1974). Translanguaging is presented in light of García and Wei's (2014) theoretical framework as a social act and an educational tool allowing students to access academic materials while maintaining and improving their mother tongue. Field observations and classroom interactions indicate that when teachers deliberately include their whole linguistic repertoire, students exhibit fresh linguistic confidence, learning deepens, and increased participation. It also finds influence in Zentella's (1997) ethnography of Latinx communities in the United States, which highlights the need of multilingual practices in identification, and Poplack's (1980) study on code-switching. The research claims that rather than bilingualism itself, monolingual policies and practices are responsible for the drop in Spanish competency in schools. This presentation promotes a pedagogical change towards additive bilingualism since translanguaging is seen as a viable, identity-performing technique that can improve learning and linguistic parity in multilingual classrooms rather than as a sign of confusion or lack.

14:05-14:30
100637 | *Exploring Student Performance and Perceptions of AI-Generated Songs for Learning English Sentence Structures*
Phimpawee Treesorn, Mae Fah Luang University, Thailand

In English language classrooms, the teaching and learning of grammar—particularly sentence structures and common sentence-level errors—remains a significant challenge for EFL learners. Knowledge of sentence structures, such as simple, compound, and complex forms, as well as the ability to identify and correct sentence-related errors like fragments, run-ons, and comma splices, is crucial for effective communication in both academic and professional contexts. This study set out to investigate the effectiveness of AI-generated songs in enhancing students' understanding of these grammatical concepts. Lyrics focusing on these structures and problems were generated using Gemini AI and vocalized through the Musify AI singing platform to create engaging learning materials. A total of 27 undergraduate students enrolled in an English Communication course participated in the study. The research design included a pretest to assess students' baseline grammar knowledge, a satisfaction survey conducted during the listening session, and a posttest to measure changes in performance. Results indicated a slight improvement in student scores following exposure to the AI-generated songs, along with generally positive perceptions of the method's usefulness and engagement. However, some limitations were observed in the AI-generated outputs, including inconsistent spacing, unnatural phrasing, and lack of clarity in certain sections. These findings highlight the need for more refined input prompts to produce coherent and pedagogically effective content. This study concludes with practical implications for integrating AI-generated songs into grammar instruction as an alternative approach for EFL learners.

14:30-14:55
101442 | *Challenges in Teaching English for Specific Purposes in Medicine: Perspectives from English Teachers*
Chie Saito, Teikyo University, Japan

English for Specific Purposes (ESP) in medicine poses unique challenges for language instructors, many of whom do not have medical training. This study explores how teachers with different levels of experience perceive and approach the task of teaching medical English. Semi-structured interviews were conducted with three English teachers: one novice and two experienced instructors. Findings revealed notable contrasts. The experienced teachers expressed enthusiasm for teaching medical English, drawing confidence from years of practice. They favored lecture-style classes, emphasizing structured delivery of specialized content. In contrast, the novice teacher reported spending significantly more time on preparation, yet contributed fresh perspectives on pedagogy. She highlighted the need to incorporate more communicative activities, such as pair work, to enhance students' practical language skills. These differing viewpoints illustrate a central tension in ESP pedagogy: balancing the transmission of technical knowledge with opportunities for interactive communication. The study underscores the importance of supporting novice teachers with practical resources and training, while also encouraging experienced instructors to adopt communicative methods alongside content delivery. By examining the perspectives of both novice and veteran teachers, this presentation aims to shed light on the evolving pedagogical challenges of medical English instruction and to stimulate discussion on effective strategies for ESP in medicine.

14:55-15:20
97817 | *Subtitling Modalities in Streaming Dramas and Their Role in Enhancing EFL Vocabulary Acquisition*
Wenhua Hsu, I-Shou University, Taiwan

This study investigated the effects of various subtitling modalities on vocabulary acquisition among English as a Foreign Language (EFL) learners in the context of binge-watching drama series. Four subtitling conditions were examined: (1) bimodal subtitling (L2 video with L2 captions), (2) standard subtitling (L2 video with L1 subtitles), (3) reversed subtitling (L1 video with L2 subtitles), and (4) L3 video with L2 subtitles. Eight groups of Taiwanese university students across two proficiency levels watched four drama series over four months, rotating through each modality. Participants were instructed to avoid dictionary use, and vocabulary tests were administered without grade incentives. The results revealed significant differences in vocabulary gains across subtitling modalities and proficiency levels. Upper-intermediate learners acquired an average of 20.89 out of 28 target words, while low-intermediate learners averaged 17.12 words. L3 video with L2 subtitles yielded the highest gains, followed by bimodal and reversed subtitling, with standard subtitling resulting in the lowest performance. These findings suggest that EFL learners may also benefit from watching non-English-language dramas with English subtitles, expanding vocabulary through repeated exposure. English subtitles, analogous to graded readers in extensive reading programs, may offer valuable lexical input, regardless of the original language of the audiovisual content.

15:35-17:15 | Room 601 (6F)

Wednesday Onsite Parallel Session 4

ACE2025 | Teaching Experiences, Pedagogy, Practice and Praxis (Workshops)

Session Chair: Syuzanna Torosyan

15:35-16:25

101176 | *Re-energizing a Focus on Dignity in Higher Education*
Hieu Ngo, University of Calgary, Canada
Yeonjung Lee, Chung-Ang University (South Korea) and University of Calgary, Canada

Supporting the theme area of global citizenship and peace, the proposed workshop will focus on dignity in higher education. It is grounded in an ongoing collaborative effort to promote human dignity through critical dialogues and actions (see https://www.humandignityconference.com/). Against the backdrop of global warming, conflicts and war, and the denial of basic human rights to millions of people worldwide, it aims to evoke inspiration, hope and fresh ideas, and facilitate an exploration of the roles of higher education in promoting dignity in societies. Through dialogues and experiential learning activities, participants will be invited to reflect on the personal, organizational, and societal contexts that underscore the need to reawaken and promote dignity in humanity building efforts. They will be supported to examine the theoretical constructs and frameworks that guide their analyses of dignity in all aspects of higher education. Additionally, they will explore practical strategies for promoting dignity in educational governance and leadership, teaching and learning, research and scholarship and service. Throughout the workshop, participants will be encouraged to share their experiences, wisdom and critical awareness of effective practices and potential pitfalls related to dignity-focused work.

16:25-17:15

95382 | *Engaging Minds and Enhancing Speech Through Motivational Activities for EFL Learners*
Syuzanna Torosyan, American University of Armenia, Armenia
Rubina Gasparyan, American University of Armenia, Armenia

It can hardly be denied that speaking is a vital yet challenging skill for learners that involves interaction, as well as aural comprehension, along with other factors such as classroom environment and student motivation. Teachers as one of the main stakeholders responsible for their students' success are believed to be creators of a learner-friendly classroom environment and resourceful enhancers of motivation. The challenge sounds like mission impossible. However, many resourceful teachers have found a simple way of helping their students to refine their speaking skills by enhancing their motivation through challenging and creative tasks. A number of studies come to advocate that helping students develop intrinsic motivation through creative tasks can lead to improvements in speaking skills in various educational contexts. In addition to having adequate knowledge to be able to speak, students apparently need to want to speak, they need to have the motivation to express their ideas and share their thoughts. This workshop gives a brief overview of speaking as a skill that combines a number of abilities, and offers an insight into contextual and interactional factors. A discussion on the need for communicative approach through creative activities will follow, flavored with suggestions of several classroom tasks, including video-based speaking activities, interactive role plays, themed discussions and negotiations, as well as argumentation/persuasion and improvisation exercises. Hence, by incorporating these ideas and activities, the teacher can create a dynamic learning environment that boosts EFL speaking skills in students, assisting them in gaining confidence and fluency in real-life communication.

15:35-17:15 | Room 603 (6F)
Wednesday Onsite Parallel Session 4
ACE2025 | Innovative Technologies in Education
Session Chair: Danhui Zhang

15:35-16:00
97279 | *Needs Assessment for a Web-based AI-Constructivist-Gamification Learning Environment to Enhance Geometric Reasoning in Northeast Thai Primary Students*
Nitiphat Trirat, Khon Kaen University, Thailand
Parama Kwangmuang, Khon Kaen University, Thailand

This study assessed the needs for developing a web-based learning environment integrating artificial intelligence (AI), constructivism, and gamification to enhance geometric reasoning skills among primary school students in Northeast Thailand. A mixed-methods approach was employed, involving 200 students, 20 mathematics teachers, 20 curriculum experts, and 30 parents, selected through stratified random sampling to ensure representativeness. Data were collected using interviews, questionnaires, observations, and focus group discussions. Descriptive statistics revealed that 65% of students struggled with geometric reasoning, while 75% of teachers faced challenges in delivering engaging instruction. A one-way ANOVA showed significant differences in the perceived needs among the four groups [$F(3, 266) = 9.78$, $p < 0.001$], with students having the lowest mean score ($M = 4.12$, $SD = 0.78$). The results indicated a strong need (85% agreement) for an innovative web-based learning environment that incorporates AI, constructivism, and gamification principles to support students' geometric reasoning development. These findings provide valuable insights for designing a learning prototype tailored to the needs of primary school students in Northeast Thailand.

16:00-16:25
97101 | *Generative AI for Personalized Quiz-Based Approach to Enhance Authentic Learning Among Engineering Students*
Mrinal Musib, National University of Singapore, Singapore

While artificial intelligence (AI) has emerged as a powerful tool in advancing modern pedagogical methods, its integration within Biomedical Engineering remains relatively under-explored. Conventional lectures, heavily reliant on PowerPoint presentations, often fail to address the diverse and dynamic learning needs of individual students. In response, this project investigates the potential of the "PersonalQuizzer" system to deliver a personalized, quiz-based learning experience. The innovative platform dynamically generates quizzes from a curated, lecturer-developed question bank, tailoring assessments to each student's performance level while linking to relevant learning resources. To evaluate its effectiveness, students completed quizzes that were directly derived from lecture slides; subsequently, they engaged with the AI-powered quiz generator. This comparative analysis focused on student engagement, satisfaction, and overall learning outcomes, with preliminary results indicating that the system not only creates engaging quizzes but also offers adaptive feedback and efficiently retrieves essential course materials. Ultimately, this project aims to provide a scalable solution designed to enhance student engagement and outcomes in biomedical education. The insights contribute to the evolving field of AI in education, underscoring how generative AI can serve as a transformative pedagogical tool to redefine traditional teaching methodologies.

16:25-16:50
96250 | *From Whiteboards to Clicks: Navigating Digital Literacy Among Teacher Educators at UNACH*
Karina Guadalupe Diaz Pedroza, Universidad Autónoma de Chiapas, Mexico
Maricela Alfaro Merchantd, Universidad Autónoma de Chiapas, Mexico
Cley Velázquez Rodríguez, Universidad Autónoma de Chiapas, Mexico

In an increasingly innovative educational landscape, digital literacy—the ability to use technologies critically, confidently, and effectively—has become essential, particularly for those shaping future educators. This study explores the digital literacy experiences of teacher educators in the Bachelor's Degree in English Language Teaching at the Faculty of Languages, Tuxtla Campus, of the Autonomous University of Chiapas (UNACH), Mexico. The research is anchored in key theoretical frameworks that shed light on the evolving relationship between educators and digital tools. Prensky (2001) draws attention to generational contrasts in digital use through his concept of digital natives versus digital immigrants. Gee (2003) frames digital literacy as a situated social practice, emphasizing the cultural and contextual dimensions of technology use. The TPACK model by Mishra and Koehler (2006) merges technological, pedagogical, and content knowledge to present a unified approach to digital proficiency in education. To explore these dynamics, the study employs semi-structured interviews and written narratives from teacher educators with at least five years of experience in the program. These participants have witnessed significant transformations over time, particularly with the progressive integration of digital tools in educational contexts. The analysis centres on their perceptions of the challenges, benefits, and adaptation strategies involved in incorporating technology into English language teaching, offering insights into how digital literacy is constructed and reshaped through professional experiences. The study aims to offer valuable insights for the development of institutional policies, professional learning opportunities, and pedagogical innovations that support more effective and inclusive digital practices in higher education settings.

16:50-17:15
97426 | *Investigating 6th Grade Students' Scientific Argumentation Through Two Years of Online STEM Inquiry Learning: A Process Data Mining Approach*
Danhui Zhang, Beijing Normal University, China
Xiaoxu Lu, Beijing Normal University, China
Shixuan Qian, Beijing Normal University, China

This study explores the development of scientific argumentation skills among 400 6th-grade students engaged in two years of online inquiry-based STEM learning projects. Scientific argumentation, a cornerstone of science education, involves constructing claims, supporting them with evidence, and providing logical reasoning while addressing counterarguments. The inquiry learning activities were designed following a structured sequence: proposing questions, designing experiments, collecting data, analyzing data, and drawing conclusions. Using Toulmin's Argumentation Pattern (TAP) as a framework, this research evaluates key components of argumentation, including claim quality, evidence usage, reasoning depth, and rebuttals. A tailored rubric assesses these elements on a four-level scale, capturing the progression of argumentation sophistication.To analyze students' online activities, process data mining techniques are employed to extract and categorize digital interaction logs. These logs capture critical elements such as resource utilization, collaborative discussions, and the construction of arguments within the inquiry platform. Preliminary findings indicate significant progression in argumentation components, including clearer claims, stronger evidence usage, improved reasoning coherence, and increased ability to address counterarguments. Learning trajectories reveal distinct patterns of growth and subgroup analysis reveals variability in argumentation development based on initial competencies. Additionally, the inquiry design phases show varying impacts: data analysis and experiment design strongly enhance reasoning, while data collection aids evidence alignment.The study further highlights how digital tools facilitate STEM inquiry, with tools for data visualization and collaboration proving particularly effective. These findings provide actionable insights for designing digital platforms and instructional strategies that effectively nurture scientific argumentation in middle school students.

15:35-17:15 | Room 604 (6F)
Wednesday Onsite Parallel Session 4
ACE2025 | Higher Education
Session Chair: Nelson Arnante

15:35-16:00
100258 | *Bridging Disciplines: Enhancing Integrative Thinking Via Collaborative Problem-Based Learning in Higher Education*
Yanyi Wu, Zhejiang University, China
Chenghua Lin, Zhejiang University, China

Addressing complex challenges requires graduates with integrative thinking, a competency often underdeveloped due to disciplinary silos in higher education. This study compared the effectiveness of structured interdisciplinary Collaborative Problem-Based Learning (CPBL), featuring explicit integration scaffolding, versus a traditional collaborative model in fostering undergraduates' integrative thinking skills. Using a quasi-experimental, mixed-methods design within an interdisciplinary course, integrative thinking was assessed pre/post via a validated performance task, complemented by qualitative data from reflective journals and focus group interviews. Quantitative analysis showed the CPBL group achieved significantly greater gains in integrative thinking. Qualitative analysis revealed that structured scaffolding (particularly a mandatory framework-building phase), navigating disciplinary differences, collaborative dynamics, facilitative instruction, and developing metacognitive awareness were key factors influencing the integration process from student perspectives. Findings indicate that a holistic, structured CPBL approach is a significantly more effective pedagogy than traditional collaboration for enhancing integrative thinking, highlighting the value of intentional design with explicit support for synthesis.

16:00-16:25
101069 | *From Studio to Society: A Hardware–Software–Heartware Framework for Interdisciplinary Design Innovation in the New World University*
Agnes Xue, Singapore Institute of Technology, Singapore
Renjie Zheng, Singapore Institute of Technology, Singapore

The increasing complexity of global challenges demands a fundamental rethinking of interdisciplinary higher education. This paper introduces a novel pedagogical model developed at the Singapore Institute of Technology through the Design Innovation common module, bringing together students from almost forty degree programmes — spanning nursing, engineering, computing, and allied health — to tackle authentic problems using Critical Design Futures Thinking (CDF™) and Design Your Life (DYL) approaches. Central to this model is the Hardware–Software–Heartware (H–S–H) Tri-Layer Framework. Hardware refers to the physical campus as a living laboratory, in the university's new campus where built environment, digital infrastructure, and community contexts serve as innovation testbeds. Software represents the curriculum as an adaptive "operating system," designed in agile sprints from empathy-based problem framing to futures-oriented prototyping, integrating ethical Generative AI use with human-centred decisions. Heartware addresses the socio-emotional and cultural dimensions of learning, including pedagogical ethos, disciplinary perspectives, and diverse facilitation that cultivate collaborative mindsets, reflective practices, and ethical responsibility. Drawing on vignettes from recent cohorts, including sustainable mobility, inclusive healthcare, and adaptive food systems for the future of Singapore — we illustrate how H–S–H operationalises interdisciplinarity as a dynamic interaction between space, structure, and culture, rather than mere disciplinary co-location. We argue for the framework's transferability to general education and industry–academia Continuing Education and Training programmes. The paper concludes with a roadmap for scaling H–S–H, positioning campuses globally as both education studios and societal prototyping platforms.

16:25-16:50
96478 | *Medical Emergency Training in a Dentistry Context*
Sowmya Shetty, The University of Queensland, Australia
Jessica Zachar, The University of Queensland, Australia

The study aimed to investigate dental students' perceived confidence and preparedness for medical emergencies within a dental setting following a novel emergency module within a clincial practice curriculum in a dentistry undergraduate training program. Over four years, three-hundred dental students participated in a self-administered questionnaire after the medical emergency simulation training. Descriptive analysis was performed to determine perceived confidence and preparedness gained through medical emergency simulation training. The data were tabulated, graphed, and analysed using SPSS and GraphPad Prism software. The study observed that prior to training over half of the students had a low level of confidence in managing medical emergencies with 22.7% of students not confident and 39.1% were slightly confident. After the simulation training, 61.2% were fairly confident and 10.4 were completely confident. It was also found that 30.8% reported that they had borderline or poor non-technical skills and that after simulation training, 68.6% reported good or excellent non-technical skills. 83.6% reported that the simulation training felt realistic and 97.6 agreed/strongly agreed they felt more prepared for medical emergency situations. It is concluded that the novel hands-on interactive simulation is effective in increasing knowledge and self-reported confidence in handling medical emergencies within a dental setting.

16:50-17:15
97193 | *Understanding How the Final Output of Religious Education 104 (REED 104) Impacts the Lives of Health-Allied Students at De La Salle Medical and Health Sciences Institute Through the Lens of Matthew Fox's Four Paths*
Nelson Arnante, De La Salle Medical and Health Sciences Institute, Philippines

Religious Education 104 (REED 104), also known as Spirituality of Social Transformation, is one of three Religion courses offered to college students at De La Salle Medical and Health Sciences Institute. The course aims not only to raise awareness of current social issues but also to encourage students to actively participate in addressing these concerns, guided by the teachings of the Catholic Church. Like other general education subjects, REED 104 employs a variety of pedagogical approaches to enhance student learning. A key component of the course is the final output, titled "Si Kuya Juan at ang Kabataan", which plays a vital role in deepening the students' understanding of the course's essence. This project requires students to care for children aged six to nine, who are considered part of the marginalized sectors of society—the least, the lost, and the last. Each class of approximately 40 students is assigned a group of around ten children. Students are given nearly a semester to prepare for this culminating activity, ensuring its meaningful execution. The primary objective of this initiative is to provide students with the opportunity to extend compassion and support to underprivileged children, and to foster in those children a sense of being cared for—if only for a day—by their "older siblings" in the academic community. This paper explores how this final output influences and transforms the students' lives, as evidenced through their reflection papers, which are submitted as part of the course requirements. The analysis is framed using Matthew Fox's Four Paths of Creation Spirituality, providing a lens through which the students' lived experiences are interpreted and understood.

15:35-17:15 | Room 605 (6F)
Wednesday Onsite Parallel Session 4
ACE2025 | Educational Policy, Leadership, Management and Administration
Session Chair: Ma. Cristina Zulueta

15:35-16:00
96950 | *Pathways to Optimizing Board Performance in the BS Medical Technology Program: Basis for an Action Plan*
Joseph Erol Cuevas, La Consolacion University Philippines, Philippines

This study aims to identify the underlying factors affecting the board performance of BS Medical Technology graduates and propose an action plan for academic and institutional improvement. Employing a parallel mixed-methods design, the research gathered insights from recent graduates and faculty members through surveys and interviews. Key areas assessed include curriculum content, faculty expertise, available resources, assessment practices, student behavior, and well-being support. Quantitative data were analyzed using descriptive statistics, while qualitative responses were examined thematically. Findings revealed significant gaps in alignment between curricular delivery and licensure exam preparedness, highlighting the need for enhanced faculty development, resource allocation, and student support mechanisms. Anchored on the theory of constructive alignment, the study underscores the importance of coherence across teaching, learning activities, and assessments. The results serve as the foundation for a strategic action plan to optimize licensure examination outcomes and elevate academic quality in the BS Medical Technology program.

16:00-16:25
95446 | *The Role of Accreditation in Licensure Examination Performance: Challenges and Implications for Teacher Education Institutions in the Philippines*
Annabelle Gordonas, Polytechnic University of the Philippines, Philippines

This research investigated the impact of accreditation on the performance of the select accredited Teacher Education Institutions (TEIs) of the Licensure Examination for Teachers (LET) in the Philippines. Utilizing a convergent parallel mixed-methods approach, the research combined quantitative survey responses and qualitative findings to investigate the level of accreditation implementation and its effect on LET performance. Eight accredited TEIs in the Philippines were chosen. The quantitative aspect employed a descriptive-correlational design, evaluating accreditation in significant areas: purposes and objectives, community extension services, faculty, instruction, library, research, student services, and administration. The qualitative process used thematic analysis through Braun and Clarke involving interviews with academic leaders and faculty that uncovered major challenges and best practices in accreditation. Findings claimed the importance of ongoing faculty development, resource augmentation, and curriculum alignment with accreditation standards. On the basis of these results, the research yielded the "Instruction Theory of Accreditation," highlighting the central position of instructional quality in determining licensure examination performance. These findings could help enhance accreditation policies and teacher education programs in the Philippines.

16:25-16:50
97500 | *Transforming Work Structures in Region-3 LHIs: Theoretical Insights from Change and Diffusion of Innovation Theories*
Menandro T. Manalo, Meycauayan College; Pambayang Dalubhasaan ng Marilao, Philippines
Dolores DC. Cajucom, Pambayang Dalubhasaan ng Marilao, Philippines
Joan Valerie G. Javier, Pambayang Dalubhasaan ng Marilao, Philippines

Grounded in Change Theory and Diffusion of Innovation Theory, this study assessed the organizational readiness of 16 Local Higher Education Institutions-LHEIs in Region 3 for implementing Flexible Work Arrangements-FWAs to ensure continuity during disasters and national emergencies. Using descriptive-evaluative, descriptive-comparative, and descriptive-correlational research designs, data were gathered from 1,945 personnel 1,681 teaching and 164 non-teaching staff. Reliability testing using Cronbach's alpha confirmed strong internal consistency: awareness $\alpha = 0.764–0.897$, soft skills $\alpha = 0.778$, hard skills $\alpha = 0.872$, readiness $\alpha = 0.844–0.928$, and challenges ($\alpha = 0.794$), with overall reliability at $\alpha = 0.909$. Teaching personnel exhibited high awareness of FWAs across offline, online, and blended learning modalities with grand mean 3.40, while non-teaching personnel reported high awareness of flexiplace, compressed workweek, skeleton workforce, and work shifting with grand mean 3.02. Both groups indicated high organizational readiness with means 3.28 and 3.15. Teaching personnel showed very high capabilities in soft and hard skills with mean 3.54, while non-teaching personnel rated themselves highly in both with mean 3.37. Top challenges frequently appeared with both groups included inability to meet performance demands 93.6%, mental stress due to limited in-person interaction 87%, and distractions from personal concerns 80.1%. Significant differences in capabilities were found by age, sex, employment status, length of service, academic rank, and educational attainment $p < .05$. A strong positive correlation between capabilities and readiness was observed with Pearson $r = 0.751$, $p = 0.000$. The study recommends strategic action plan focusing governance, human resource development, digital infrastructure, and resource management.

16:50-17:15
96951 | *Grounding a Quality Assurance Framework from the Perspectives and Experiences of Deans from PAASCU Level III and IV Accredited Medical Schools*
Ma. Cristina Zulueta, La Consolacion University Philippines, Philippines

The COVID-19 pandemic severely strained the Philippine healthcare system, exacerbating an existing shortage of doctors and allied health professionals. In response, the government enacted the Republic Act 11509, providing full scholarships for deserving college graduates to pursue medical degrees, leading to a significant increase in new medical schools. Recognising that quality medical education is crucial for producing competent doctors and improving healthcare, robust quality assurance mechanisms are essential for these institutions. However, a standardised quality assurance framework for Philippine medical schools is currently lacking. This grounded theory study, guided by Hatch and Schultz's Identity Dynamics theory, investigated the experiences of administrators from Augustinian Sisters of Our Lady of Consolation schools and the perspectives of Deans from Level III and IV accredited medical schools. Through open, axial, selective, and theoretical coding of interview data, the emergent theory, Quality Medical Education driven by Core Values, became the central focus for a proposed quality assurance framework specifically designed for new medical schools. The proposed framework aims to establish quality assurance structures, procedures, and mechanisms across all areas of a medical school, intrinsically linked to its core values. This addresses the critical gap of absent frameworks to guide new institutions in delivering quality medical education while considering their organisational identity and image. This study also affirms the strong alignment between the proposed framework and the Identity Dynamics theory in ensuring quality medical education that meets government and accreditation standards, all while being consistent with the school's organisational identity.

15:35-17:15 | Room 607 (6F)
Wednesday Onsite Parallel Session 4
ACE2025 | Education, Sustainability and Society
Session Chair: Venus Loremia

15:35-16:00
101564 | *Bangladeshi Mothers Who Use Day-care Services in Ready-made Garment Factories Report Lower Depression and Anxiety Symptoms*
Nur E Salveen, International Centre for Diarrhoeal Disease Research, Bangladesh
Syeda Fardina Mehrin, International Centre for Diarrhoeal Disease Research, Bangladesh
Sheikh Jamal Hossain, International Centre for Diarrhoeal Disease Research, Bangladesh
Sabbir Hossain, International Centre for Diarrhoeal Disease Research, Bangladesh
Jena D Hamadani, International Centre for Diarrhoeal Disease Research, Bangladesh

Despite the commitment to SDG-4.2, a national comprehensive ECD policy, and a Daycare Act, the operationalization of daycare facilities within Ready-Made Garment (RMG) sector remains limited. This sector comprises 65% female staff, predominantly rural migrants who left their children at their parental house. This separation leads to emotional deprivation and suboptimal developmental trajectories among children. This formative research explores if daycare utilization benefits child and maternal well-being. A total of 805 mothers (411 daycare users and 394 non-users) of children aged under 6 years were interviewed using child morbidity, Centre for Epidemiological Gtudies-Depression (CES-D), generalized Anxiety Disorder (GAD-7), and subscales from World Health Organization's Quality of Life (WHO-QoL) and Women's Agency Scale (WAS-61) questionnaires. We found lower depressive [β (95% CI): -1.26 (-2.03, -0.49), p=0.001] and anxiety symptoms [β (95% CI): -0.51 (-0.92, -0.11), p=0.01] among daycare users. Additionally, exclusive breastfeeding up to six months was alarmingly low (21%) among both populations, which is far below the national average (55%), indicating critical awareness and infrastructural gaps. Among non-users, 14 % mothers left their children with their parents, further emphasizing children's emotional and developmental vulnerabilities. We did not find any difference in QoL, WAS and child morbidity between the groups. In our cultural context, evidence is scarce; these findings offer compelling justification for early intervention and policy action. Strengthening onsite childcare in RMG settings has the potential to improve maternal mental health, foster early childhood development, and improve workforce retention and productivity, vital to Bangladesh's sustainable economic advancement.

16:00-16:25
101417 | *A Study for ODA Through Sports Activities, with a Focus on Korean University Students*
Sun Young Park, Korea National Sport University, South Korea

This study aims to explore specific strategies to maximize the effectiveness of Official Development Assistance (ODA) through sports activities among university students in South Korea. It seeks to overcome the limitations of traditional, large-scale infrastructure or simple material support-based ODA models by proposing a sports-based ODA model that contributes to youth development both in Korea and the beneficiary countries. Specifically, the participation of Korean university students in sports-based international development cooperation projects will not only enhance their individual capabilities but also contribute to the promotion of global citizenship. The objectives of this study are twofold: first, to analyse the sports-related international development cooperation projects in Korea; and second, to explore how to enhance global citizenship and youth development both in Korea and the beneficiary countries. To achieve these objectives, the research employs content analysis and interviews with experts from relevant organisations. The research yielded the following key findings: First, there is a clear demand and need for sports activities in ODA projects from partner countries. Second, it is necessary to develop diverse international sports volunteer programs in collaboration with various organizations to enhance the global competence of Korean university students. Lastly, the study found a need for the development of professional training and educational curricula to support these initiatives. The study suggests that it is crucial to develop objective metrics to verify the effectiveness of sports activities in international development cooperation for youth development and global citizenship. Furthermore, it recommends a shift in focus from external infrastructure to the development.

16:25-16:50
97297 | *Social Justice Goals in Education: The Australian Context*
Tebeje Molla, Deakin University, Australia

Since the late 1980s, Australia has issued a national education declaration each decade to articulate shared priorities. While these frameworks—Hobart (1989), Adelaide (1999), Melbourne (2008), and Alice Springs (Mparntwe) (2019)—consistently invoke equity and inclusion, their substantive commitments to social justice remain under-examined. This paper critically analyses how social justice goals are conceptualised in the declarations and how these framings have shifted over time. Drawing on Nancy Fraser's multidimensional theory of justice, the paper distinguishes between two interrelated dimensions: socially just education, which concerns the creation of equitable and inclusive systems through fair resource distribution, culturally sustaining environments, and policies that remove systemic barriers; and social justice education, which focuses on developing students' critical consciousness, ethical reasoning, and civic agency through engagement with issues of justice and democracy. Using critical policy analysis, the paper maps how the declarations articulate these dimensions of justice across Fraser's domains of redistribution, recognition, and representation. The analysis identifies both continuities and shifts in the framing of social justice over three decades, revealing growing rhetorical attention to diversity and equity, yet persistent limitations in addressing deeper, transformative aspects of justice. The paper argues for future national frameworks to adopt a more integrated and explicit commitment to both structural equity and critical democratic education.

15:35-17:15 | Room 607 (6F)

Wednesday Onsite Parallel Session 4

ACE2025 | Education, Sustainability and Society

Session Chair: Venus Loremia

16:50-17:15

96917 | *Technology and Livelihood Education in Local Fashion Design: Embodiment, Community Impact, and Emphasis on Sustainability*
Venus Loremia, Cebu Technological University, Philippines

This study investigated how Technology and Livelihood Education (TLE) empowers local fashion designers and sewers to innovate, preserve cultural heritage, and promote eco-conscious practices. It highlights the role of TLE in fostering resilient and inclusive fashion industries amid globalization. Using a mixed-methods approach, data were collected from 25 purposively selected practitioners through surveys and in-depth interviews. The survey captured demographic profiles, training experiences, skill applications, and entrepreneurial activities, while interviews explored themes such as mentorship, sustainability, and cultural continuity. Findings reveal a predominantly female (64%), multigenerational workforce, with over half (52%) having less than six years of experience. Garment making is the primary focus (72%), while embroidery and upcycled fashion (20% each) indicate a growing shift toward artisanal and sustainable practices. Indigenous wear remains notably underrepresented (4%). Formal TLE training is limited (32%), with many relying on informal (36%) or no formal instruction (32%), exposing gaps in education access and skill validation. Thematic analysis identified four key insights: diverse learning pathways (formal, informal, and self-taught skills); growing eco-conscious practices (upcycling and sustainable design); the formal-informal education gap (limited access and recognition); and mentorship and cultural preservation (passing traditions through guided practice). The study recommends gender- and age-responsive TLE programs that integrate technical, sustainable, cultural, and entrepreneurial skills. Strengthening mentorship, formally recognizing informal learning, and expanding training access are essential to professionalize the sector, improve livelihoods, and safeguard local fashion traditions in a changing world.

15:35-17:15 | Room 608 (6F)
Wednesday Onsite Parallel Session 4
ACE2025 | Educational Policy, Leadership, Management and Administration
Session Chair: Zeyad Bateiha

15:35-16:00
101340 | *Push and Pull Factors Influencing International Students' Choice of Kazakhstan as a Study Destination: The Transit Route to Developed Countries*
Gulnura Arzanbekova, NARXOZ University, Kazakhstan

International student mobility has expanded considerably in recent decades, with a growing number of students choosing non-Western destinations to pursue higher education. While traditional host countries such as the United States and the United Kingdom continue to dominate, emerging education hubs like Kazakhstan are increasingly gaining visibility, fueled by policy reforms, international collaborations, and competitive academic programs (Kuzhabekova, 2024; Tight, 2022). However, Kazakhstan can be considered a semi-peripheral transition point in the global higher education landscape, often serving as a stepping stone to the Global North or other "core" countries (Zijlstra, 2020; Paul & Yeoh, 2021). This study examines the push and pull factors that influence international students' decisions to opt for Kazakhstan, focusing on the country's potential role within broader migration trajectories. This research integrates insights on student motivations, national education strategies, and transnational migration frameworks relevant to Kazakhstan. A qualitative methodology was employed using semi-structured interviews with international students. Framed by the World-Systems Theory (Wallerstein, 1974), this study contributes to the limited research on international student mobility in Central Asia, especially in Kazakhstan, focusing on migrant intentions and onward trajectories. It further contributes to higher education policy by identifying gaps in institutional practices and policy implementation, offering an understanding of the factors shaping student mobility patterns. Findings provide insights into the effectiveness of recent higher education internationalization reforms and offer evidence-based recommendations for policymakers, university leaders, and regional stakeholders to enhance international student attraction and retention.

16:00-16:25
97163 | *When English Isn't Enough: Rethinking English Teaching in Indonesia Through Overseas Experiences*
Andri Maulana, Indian Institute of Technology Patna, India
Smriti Singh, Indian Institute of Technology Patna, India

The global expansion of English presents significant challenges for non-native speakers navigating its use across diverse cultural contexts. This study explores the communication issues experienced by Indonesian students studying in India, where English is a second language. Although these students possess formal English training, many face unexpected difficulties in real-life interactions. Using survey data from Indonesian students enrolled in bachelor's to doctoral programs across various Indian universities, this preliminary research investigates how cultural norms, communication styles, and social expectations influence their ability to use English effectively. The analysis is grounded in Byram's Intercultural Communicative Competence framework, focusing on three key components: intercultural knowledge, skills of interpretation and interaction, and attitudes of openness and curiosity. The findings reveal that misunderstandings often arise from various aspects of communication, including differences in politeness strategies, body language interpretation, accent, and discourse patterns, rather than from linguistic competence. This situation affects students' daily communication and their studies in a foreign country. This study emphasises the need to pay more attention to incorporating intercultural awareness into English as a foreign language teaching in Indonesia to progress beyond language learning. By understanding how language functions differently across cultural settings, educators can prepare students for global communication and citizenship. The insights from this research offer valuable implications for designing future-oriented English teaching materials and curricula that are linguistically sound and culturally responsive, based on the current trend in intercultural communication in the global community.

16:25-16:50
94827 | *Cross-Border Higher Education Partnerships: A Comparative Legal and Policy Analysis of Joint Programs Between Saudi Arabia and Japan*
Naif Hadi A Alyami, Islamic University of Medina, Saudi Arabia

This paper explores the intersection of foreign investment law, comparative legal systems, and higher education policy in the context of cross-border partnerships between Saudi Arabia and Japan. Despite growing global interest in international joint programs, relatively little research has examined how regulatory frameworks, funding mechanisms, and institutional policies uniquely shape these collaborations. Through document analysis, stakeholder interviews, and comparative policy review, this study examines the legal and administrative processes underpinning partnership agreements, the effects of foreign investment regulations on program development, and the influence of cultural dynamics on governance and quality assurance. Particular attention is paid to how international scholarship students benefit from—or encounter challenges within—these joint initiatives. By identifying both success factors and ongoing barriers, the findings offer actionable insights for policymakers, academic leaders, and international investors seeking to optimize cross-border educational models. Ultimately, this research aims to strengthen the foundation for sustainable, high-quality joint programs that enrich global higher education landscapes.

16:50-17:15
101337 | *From Replication to Responsiveness: Rethinking Institutional Structures at International Branch Campuses*
Summer Bateiha, Virginia Commonwealth University Qatar, Qatar
Zeyad Bateiha, Virginia Commonwealth University Qatar, Qatar
Sadia Mir, Virginia Commonwealth University Qatar, Qatar

International branch campuses (IBCs) are extensions of parent campuses in foreign countries, often from Western universities. These imported branch campuses usually deliver the curricula and degree qualifications of the main campus. Although this imitation is meant to ensure uniformity with the parent campus, it does not always recognize and respond to the local culture of the host country. Instead, it can serve to transfer Western beliefs and knowledge systems on non-Western communities, reproducing colonial mindsets and marginalizing local traditions, ways of knowing, and cultural practices. Decolonizing IBCs is an important step toward addressing the enduring legacies of colonialism in global education. It calls for a critical examination of power dynamics, a move away from Western-dominant frameworks, and a deeper recognition of diverse ways of knowing. This presentation considers the way one IBC interacts with the host country's cultural context, in particular, the modification of the academic schedule to reflect religious observances. This case study explores student responses to the imposition of an American schedule during the Holy Month of Ramadan at a campus where over 95% of the students are Muslim. In Spring 2023, over 70% of the students signed a petition requesting a more inclusive approach to Ramadan scheduling. However, no action was taken the next year. In the third year, three colleagues collaborated to change the schedule. They encountered resistance including rigid performance indicators, institutional inertia, and academic gatekeeping. This presentation reflects on these challenges and considers how efforts toward decolonization unfolded despite systemic obstacles.

15:35-17:15 | Room 702 (7F)
Wednesday Onsite Parallel Session 4
ACE2025 | Education and Difference
Session Chair: Apeksha Srivastava

15:35-16:00
98263 | *Through the Lens of the Indigenous People: Understanding Conceptions of Giftedness Among an Ayta Community in Pampanga, Philippines*
Kimberly M. Perillo, Ateneo de Manila University, Philippines
Maria Kristina S. Alfonso, Ateneo de Manila University, Philippines

Giftedness research is mostly derived from models contextualized in the West that often focus on “advanced” or “superior” intellectual abilities gauged by employing standardized measures also constructed from the West. This lens is unable to reflect the Indigenous contexts where giftedness may unfold in actions that are entrenched in their culture, traditions, and shared experiences as a community. In this study, giftedness is explored among a group of Ayta in Pampanga, Philippines. An ethnographic case study approach was utilized using data collected in a span of one and a half years through immersion, interviews, and the researchers’ field notes. Findings yielded show that the definition and perspective of giftedness differs from the more western-centric approaches. The concept is defined by community-conferred functions and responsibilities instead of the commonly known academic-oriented success. These roles include survival skills, leadership, and other traits that are believed to be gifts from a divine being. It was also found that the idea of giftedness has started to shift among the younger Ayta members. This is attributed to being accommodated in typical schools of towns and cities that already adhere to the school system currently in place. These results encourage a review of the institutional curriculum and the educational praxis to ensure that identifying and nurturing giftedness among Indigenous populations is culturally sensitive, inclusive, and preserves the unique ethos that shapes who they are.

16:00-16:25
97359 | *Development and Validation of a Student Voice Approach-Based Instrument to Measure Secondary Students’ Inclusion in Inclusive Mathematics Classroom*
Heidemae Tabor, University of Science and Technology of Southern Philippines, Philippines
Laila Lomibao, University of Science and Technology of Southern Philippines, Philippines

Amid global calls for more inclusive education, students’ voices, particularly within mathematics classrooms, remain underrepresented in shaping inclusive practices. This exploratory sequential mixed-methods study aimed to capture students’ perceptions of inclusion in inclusive mathematics classrooms to inform the development of a valid and reliable inclusion scale. The qualitative phase involved a literature review and a multiple case study with two months of classroom observations and interviews with 41 secondary students with and without special needs and diverse learning needs. Two key themes emerged: perceptions of classroom climate and perceptions of explicit instruction. These informed the development of a 13-item draft instrument titled Secondary Students’ Perception of Inclusion in Inclusive Mathematics Classrooms. Face validity and reliability were established through expert panel reviews and cognitive interviews. The revised scale was administered to 130 students across four inclusive schools. Exploratory factor analysis revealed a two-factor structure: Motivating Teaching Practices (4 items; factor loadings: 0.53 to 0.85) and Facilitative Teaching Practices (3 items; loadings: 0.50 to 0.82). Five items were removed based on empirical criteria. Students identified inclusion in terms of motivational support, such as kindness, humor, and collaborative learning, as well as instructional clarity, including step-by-step explanations and consistent feedback. Final validation confirmed strong content validity (CVI = 1.00) and high internal consistency (Cronbach’s α = 0.894; ω = 0.97). This study offers a student-informed tool to assess inclusive practices in mathematics classrooms. The scale can help teachers reflect on and improve strategies to support diverse learners. Further validation is recommended.

16:25-16:50
97367 | *Knowledge and Attitudes Toward ADHD: A Qualitative Exploration of Indonesian Teachers’ Perspectives*
Dewinta Ariani, Universitas Negeri Jakarta, Indonesia
Iriani Indri Hapsari, Universitas Negeri Jakarta, Indonesia
Kahfi Hizbullah, Universitas Negeri Jakarta, Indonesia

Attention Deficit Hyperactivity Disorder (ADHD) is a common neurodevelopmental disorder in children, marked by inattention, hyperactivity, and impulsivity. These symptoms affect not only academic performance but also social functioning and emotional well-being. Teachers play a key role in early identification and classroom support for students with ADHD. However, limited research in Indonesia has examined teachers’ understanding of this condition, not only in terms of their knowledge, but also their attitudes toward students with ADHD. This study investigates the knowledge and attitudes of school teachers towards ADHD, as well as their classroom responses. Using semi-structured interviews and purposive sampling, data were collected from 41 teachers across various schools. Findings show that while many teachers can identify behavioral signs associated with ADHD, most are unsure about appropriate interventions or next steps. In addition, teachers’ attitudes and responses sometimes reflect uncertainty or hesitation, and sometimes not aligned with the specific needs of children with ADHD, which may hinder the creation of a fully inclusive and supportive learning environment. The lack of training and resources contributes to inconsistent support, negative labeling, and delayed intervention. This study highlights the urgent need for comprehensive teacher training and supportive school policies to enhance understanding, improve responses, and foster a more inclusive learning experience for students with ADHD.

16:50-17:15
95393 | *What Is Better—Facts or Stories?: Information Retention in Indian College Students when Exposed to Textbook Versus Narrative Formats*
Apeksha Srivastava, Indian Institute of Technology Gandhinagar, India
Frederick L. Coolidge, University of Colorado Colorado Springs, United States

We investigated short-term and long-term information retention of stories versus expositions among Indian college students by communicating information about personality disorders (PDs) through characters from popular realistic fiction narratives or the Diagnostic and Statistical Manual of Mental Disorders. Research reports mixed findings (Fischer & Thies, 2024; Kromka & Goodboy, 2018; Wolfe & Woodwyk, 2010) with limited evidence of such studies from India. 200 IIT Gandhinagar students read a short story and answered multiple-choice answer questions about it (MCQs; immediate retention). From this, 100 students read information about PDs from the manual (50 students: one PD; 50: two PDs in easy-to-understand language), and 100 students read character stories from novels having the same PDs, followed by answering MCQs. After one week, they answered rearranged MCQs from Day 1. Participants observing two PDs preferred stories (n=87) over facts. Independent samples t-tests revealed that the ‘facts’ group observing one PD performed better [short-term retention] (G1: M=6.54, SD=2.26; G2: M=5.56, SD=2.39; t(98)=2.12, p=0.04, Cohen’s d=0.42). Both groups performed equally on other parameters. Possible reasons: Missing “good” story features (e.g., little information to produce vivid mental images); Even with similar word counts, more words may be required in one format to explain the information better; Sometimes, narratives add irrelevant details, distracting readers. Some participants revealed that they converted facts into a story or associated it with some real-life/movie character (recollection?). Some participants recognized some MCQs on Day 2 (familiarity?). Findings highlight the importance of optimizing information presentation to minimize audiences’ mental effort for effective understanding.

15:35-17:15 | Room 703 (7F)
Wednesday Onsite Parallel Session 4
ACE2025 | Professional Training, Development and Concerns in Education
Session Chair: Simon Adjei Tachie

15:35-16:00
97284 | *Teachers as Change Agents: Insights from Vietnam's Facilitators in the TEMA Project (April 2024 – December 2025)*
Ngọc Ánh Nguyễn, Vietnam National Institute of Educational Sciences, Vietnam
Hồng Minh Nguyễn Thị, Thái Nguyên University of Education, Vietnam
Lavinia Hirsu, University of Glassgow, United Kingdom
Dobrochna Futro, University of Glassgow, United Kingdom

The paper explores key findings from the Teaching English Multilingually through Art (TEMA) project, a comprehensive initiative that defines English teachers in Vietnam as innovative, multilingual catalysts for change. Incorporating translanguaging pedagogy (Li, 2018; García & Wei, 2014) and arts-based methodologies (Eisner, 2002), TEMA mobilised 64 local facilitators to conduct over 190 Teacher Activity Groups (TAGs) across three provinces, reaching more than 600 teachers. Facilitators received training to help their peers in adapting textbook-based parts using arts-integrated and multilingual activities. Structured training sessions provided conceptual frameworks for aligning curriculum objectives with students' language capabilities and creative expression. Baseline survey data (N = 284–316) revealed strong teacher motivation to explore innovative practices—particularly for engaging under-resourced learners—and high levels of support for peer collaboration, with 85% valuing cooperative learning. Over 40% of teachers exhibited a lack of confidence in utilizing ethnic languages or incorporating arts-based practices, underscoring a gap that TEMA aimed to address. Facilitators played a transformative role in introducing pedagogical innovation, fostering translingual competence, and cultivating inclusive learning environments. Facilitator reports and training evaluations indicate enhanced peer confidence, cultural involvement, and localized leadership. This form of decentralized, community-driven continuing professional development provides a long-term and adaptive solution to teacher burnout and policy limitations. The paper presents an evidence-based argument for reconceptualizing teachers as catalysts of educational change in multilingual settings, including pragmatic solutions to empower teachers through collaborative, context-sensitive professional networks.

16:00-16:25
101182 | *The TaRL Experience: Challenges, Practices, and Recommendations*
Ameer Benjamin Calderon, Schools Division Office of Cavite City, Philippines
Lito Palomar, Schools Division Office of Cavite City, Philippines
Audrey Joy Panganiban, Cavite National High School, Philippines
Allan Balud, Sangley Point National High School, Philippines

This study explored the lived experiences of the teachers who implemented Teaching at the Right Level (TaRL) in the City Schools Division of Cavite to understand their perceptions, the difficulties they encountered, and the practices they employed in response to the identified challenges, with the ultimate goal of developing TaRL implementation recommendations. TaRL is a globally recognized remediation strategy that groups learners according to their competency levels rather than age or grade levels to address gaps in foundational skills. Using a phenomenological approach, the study gathered data that revealed TaRL as an effective strategy for improving engagement, confidence, and student achievement. However, thematic analyses also revealed that time constraints and difficulties in group management and individual support were the challenges faced by the teachers. In response, teachers employed practices such as the use of manipulatives and visual aids and peer learning. These practices responded to the challenges in group management but cannot address the time constraints and the need for additional teachers. This study recommends the provision of ready-made lesson plans and instructional materials, increased contact time, smaller group sizes, and additional teachers and support staff for future implementation. Findings highlight the importance of contextual responsiveness, teacher empowerment, and policy support for a more sustainable and scalable TaRL implementation.

16:25-16:50
101229 | *Cultivating Teacher Collective Efficacy Through a Design–Build–Test–Learn (DBTL) Professional Learning Model in a School–University Partnership*
Ching Ting Tany Kwee, The University of New South Wales, Australia
Tony Loughland, The University of New South Wales, Australia
Douglas Broadbent, SHORE School, Australia

High-impact professional learning (PL) often centres on competence building, yet research on teacher collective efficacy shows that shared capability beliefs are shaped by professional autonomy and dialogue across levels of practice. This paper reports a two-year school–university partnership in an independent, multi-campus religious school in Sydney. Guided by the research question How can a school–university partnership support the development of teacher collective efficacy? we conducted a single-case longitudinal study comprising three whole-staff surveys and two rounds of semi-structured interviews over two academic years, using a stratified sample of 12 participants (early-career teachers, middle leaders, senior executives) across three campuses. The partnership was deliberately co-designed, school-led, and non-prescriptive, with clear role definitions; the university acted as a critical facilitative research partner. Work was structured through Design–Build–Test–Learn (DBTL) cycles to enable iterative, context-specific problem-solving and sustained professional dialogue. Findings indicate that collective efficacy was cultivated not through new mandates but by creating protected spaces for professional autonomy and cross-level dialogues. DBTL cycles anchored in authentic school priorities institutionalised these spaces and routines, supporting teacher ownership of PL, strengthening professional identity, and increasing collegial care, trust, and knowledge-sharing. The study offers an empirically grounded account of partnership conditions that build teacher collective efficacy. It contributes practical insights for leaders and researchers seeking to reframe professional learning beyond compliance, towards partnership approaches that embed autonomy, dialogue, and enduring professional growth.

15:35-17:15 | Room 703 (7F)

Wednesday Onsite Parallel Session 4

ACE2025 | Professional Training, Development and Concerns in Education

Session Chair: Simon Adjei Tachie

16:50-17:15

97542 | *Reflective Teaching as Praxis: Examining the Role of Teacher Reflection in Transforming Classroom Practice*

Simon Adjei Tachie, North West University, South Africa

This study explores reflective teaching as a form of transformative praxis within pre-service teacher education, grounded in critical pedagogy and experiential learning. It investigates how structured reflection through journaling, peer collaboration, and lecturer mentorship can enhance pedagogical awareness and responsive classroom practice. Using a qualitative case study approach, the research focused on 18 pre-service teachers and 3 lecturers over a 12-week period in a South African university-based teacher education programme. Data were collected through reflective journals, peer-led discussion groups, and semi-structured interviews, and were thematically analysed to capture emerging patterns in reflective growth. Findings indicate that ongoing engagement with reflection enabled pre-service teachers to challenge assumptions, rethink their approach to learner diversity, and adopt more inclusive, student-centered strategies. Lecturer modelling of reflection, along with dialogic peer feedback, proved essential in shaping reflective depth. Participants demonstrated improved self-awareness in their teaching approaches and greater adaptability in classroom decision-making. The study concludes that when embedded systematically into teacher education programmes, reflective practice functions not merely as an introspective tool but as a catalyst for curriculum transformation and professional identity development. Recommendations are made for institutionalising reflection through curriculum integration, sustained mentoring, and professional learning communities that promote critical inquiry.

15:35-17:15 | Room 704 (7F)
Wednesday Onsite Parallel Session 4
ACE2025 | Adult, Lifelong and Distance Learning
Session Chair: Yoanna Arlina Kurnianingsih

15:35-16:00
97415 | *How Does Generative AI Empower Self-regulated Learning? The Needs-affordances-features Perspective*
Yan Zhang, Nanjing University, China
Zhouying Liu, Nanjing Forestry University, China
Zixiu Guo, University of New South Wales, Australia
Yuxiang (Chris) Zhao, Nanjing University, China
Qinghua Zhu, Nanjing University, China

This study explores how generative AI (GenAI) empowers self-regulated learning (SRL) through the Needs-Affordances-Features (NAF) framework. It addresses three research questions: (1) What core affordances do users perceive GenAI provides in SRL contexts, and how are they categorized? (2) Which specific learning needs most frequently drive the perception of particular affordances? (3) How do learners map GenAI's concrete features to perceived affordances? A qualitative research design was adopted, involving semi-structured interviews with diverse learners who had integrated tools like ChatGPT into their SRL processes. Thematic analysis, following Braun and Clarke's six-phase framework, was used to extract key patterns from the data. The analysis revealed six core affordances that learners perceive GenAI provides: personalized tutoring, instant feedback provision, knowledge co-construction, cognitive scaffolding, metacognitive reflection facilitation, and adaptive content curation. These affordances were categorized into three overarching themes: cognitive enhancement affordances, self-regulation support affordances, and interactive learning affordances. Four primary learning needs emerged: comprehension deepening needs, self-assessment and monitoring needs, personalized learning pathway needs, and knowledge synthesis needs. The study identified three distinct NAF mapping patterns: Sequential Mapping, Reciprocal Mapping, and Emergent Mapping. This study offers the first comprehensive application of the NAF framework to GenAI-supported SRL. It contributes to educational technology literature by clarifying how learners perceive, utilize, and connect GenAI features to their learning needs. The results provide actionable insights for AI tool designers and educators aiming to integrate GenAI into SRL environments, and extend affordance theory into the domain of AI-mediated learning.

16:00-16:25
100441 | *Enhancing ICT Proficiency Through the ITeach4Heroes Program: A Community-Centered Extension Initiative*
Merardo, Jr. Camba, Laguna State Polytechnic University, Philippines
Loyd Echalar, Laguna State Polytechnic University, Philippines

The ITeach4Heroes Program is a community-centered extension initiative developed by the College of Computer Studies at Laguna State Polytechnic University – Los Baños, aiming to address the persistent digital literacy gap among professionals, particularly teachers and law enforcement personnel. Recognizing the need for continuous upskilling in an increasingly digital world, the program provided structured ICT training workshops covering areas such as digital literacy, office applications, video editing, and graphic design. This study evaluates the program's effectiveness in enhancing ICT competencies, improving workplace productivity, and fostering professional growth among its participants. Using a quantitative descriptive research design, data were gathered from participants through online surveys and analyzed using statistical tools like MS Excel and SPSS. The results revealed that 60% of respondents strongly agreed the program improved their ICT knowledge, with 65% noting increased productivity and 63% acknowledging career advancement opportunities. Teachers reported successful integration of digital tools into classroom instruction, while police officers and government employees cited improved efficiency in administrative tasks. The study highlights the importance of hands-on training and differentiated instructional approaches to accommodate varying learning curves across age groups. While overall satisfaction was high (4.63/5), participants expressed interest in advanced modules, suggesting a need for program expansion. Recommendations include implementing follow-up training, creating an alumni network, and developing an online platform for self-paced learning. The findings affirm the program's role in promoting digital inclusion and propose it as a scalable model for ICT upskilling across sectors.

16:25-16:50
97272 | *Classifying Opportunities for Lifelong Learning in Satun Through the Geo Camp Project: A Community-Driven Model of Education*
Karuna Kleubmongkol, King Mongkut's University of Technology Thonburi, Thailand
Pronyos Chattarakul, King Mongkut's University of Technology Thonburi, Thailand
Preeyakamon Soseng, King Mongkut's University of Technology Thonburi, Thailand

This study investigates how learning environments can be developed in Satun, Thailand, which is recognized both as a UNESCO Global Geopark and an emerging Learning City, through the implementation of the Geo Camp Project. Drawing on an action research framework, the study examines two years of field interaction with local communities, aiming to classify critical factors that drive learning and uncover new educational opportunities. The conceptual model is built around the intersection of three domains: learner profiles, learning content, and learning experiences. This classification reveals that people-to-people interaction and context-based content, particularly in geoscience and geo-culture, are essential to Satun's educational character. Through qualitative observation and analysis, the research highlights how Satun's untapped local knowledge (especially narratives rooted in "Geo Culture") fosters both community awareness and engagement. Geo Camp emerged as a co-created program designed and implemented by local stakeholders. It supports experiential, place-based learning while stimulating civic participation and local pride. Moreover, it acts as a strategic catalyst, influencing the local government to adopt policies that align with lifelong learning principles and quality tourism development. This paper argues that such community-centered initiatives can serve as scalable models for other rural learning cities in Asia. Geo Camp's classification model, integrating learner diversity, local content, and immersive experience, offers a practical framework to empower underserved communities through inclusive and sustainable learning ecosystems.

15:35-17:15 | Room 704 (7F)

Wednesday Onsite Parallel Session 4

ACE2025 | Adult, Lifelong and Distance Learning

Session Chair: Yoanna Arlina Kurnianingsih

16:50-17:15

97424 | *Beyond Mandatory Learning: Predictors, Barriers, and Motivation in a Workplace Data Literacy Programme*

Yoanna Arlina Kurnianingsih, National University of Singapore, Singapore
Alastair Owen Pearl, National University of Singapore, Singapore
Yiqun Liu, National University of Singapore, Singapore
Geraldine Ju Hui Ang, National University of Singapore, Singapore

This study investigates learner motivation and progression within a modular, stackable data literacy programme at the National University of Singapore (NUS), contributing to broader understandings of adult learning in professional contexts. Most existing literature on adult learning focuses on either self-enrolled learners in voluntary courses or participants in fully mandatory training, with limited attention paid to hybrid models that blend compulsory and elective elements. The NUS Data Literacy Programme (DLP) represents such a hybrid: while the foundational course is mandatory for executive and administrative staff, progression to intermediate and advanced courses is voluntary. This structure offers a unique opportunity to examine learner motivations, barriers to continued participation, and institutional strategies within an authentic workplace learning environment. Using a mixed-methods approach, the study triangulates demographic data, academic performance, post-course surveys, and in-depth interviews to assess these considerations. Higher educational qualifications and STEM backgrounds emerged as the strongest predictors of continued participation in our initial results (n=4203). Among learners who progressed into voluntary courses, the proportion with Master's or PhD degrees increased by 50.7%, and those with STEM backgrounds by 27.9% ($p<0.05$), compared to the overall foundational cohort. These shifts may reflect a stronger orientation toward lifelong learning and greater confidence in navigating challenging content. Strong performance in the foundational course was also associated with continued participation, even among learners without STEM exposure. These patterns suggest that learner self-efficacy may be more influential than academic background. Accordingly, translatable and scalable strategies to increase uptake and reduce self-efficacy barriers are discussed and evaluated.

15:35-17:15 | Room 705 (7F)
Wednesday Onsite Parallel Session 4
ACE2025 | Intercultural and Multicultural Education
Session Chair: Edward Devere Bacon

15:35-16:00
96602 | *Making Space for Discomfort: Reimagining Multicultural Education Through Global South Pedagogies*
Lakshmi Chockalingam, University of Bath, United Kingdom

Multicultural and international education often promote cooperation and reflection, invoking peace-oriented and decolonial language. Yet these approaches frequently fail to create the psychological and relational conditions necessary to process discomfort, anger, or grief. Without attention to emotional and psychosocial dynamics, such practices risk alienating both privileged and marginalised learners. Through a conceptual analysis drawing on cross-sectional insights from International Service Learning (ISL), psychosocial theory, and decolonisation literature, this paper examines how perceived power, fear, and defensiveness shape student-community interactions, often unintentionally reinforcing colonial hierarchies despite progressive intent. Instead of suppressing tension or relying solely on cognitive critique, the discussion draws on traditions from the Global South that honour moral anger, collective struggle, and relational forms of learning. The paper advocates for a shift toward "thick inclusion" in multicultural education: an approach that foregrounds emotional safety, interpersonal complexity, and the lived experiences of both students and communities. A psychosocially-informed pedagogy is proposed as a means to navigate difference without erasure, enabling deeper, more transformative learning. By integrating relational and contextual ways of knowing, this framework seeks to align educational practice more closely with the aspirations of equity and solidarity. This paper contributes a novel psychosocial framework for reimagining ISL in IE, bridging cognitive critique with emotional and relational pedagogy. It contributes to ongoing debates in international education by grounding decolonial intent in the everyday, and by emphasising not only the 'what' of transformation but also the 'how'.

16:00-16:25
100335 | *First Shot(s) X-Change: An Intercultural and Interdisciplinary Creative Pedagogy for Reflexive and Future-Ready Learners*
Tzang Merwyn Tong, Independent Scholar, Singapore

In an age of accelerating complexity, disciplinary silos are increasingly inadequate for preparing students for the creative industries of tomorrow. This paper presents First Shot(s) X-Change, an interschool, intercultural creative learning program involving 16 students from Thailand, China, Vietnam and Singapore. Grounded in interdisciplinary education, the program brings together students from film, design, animation and games to co-create across boundaries of discipline and difference. More than a collaboration, First Shot(s) is a creative experiment in mutual disruption. Over 10 days online, students enter one another's disciplines, navigate language barriers and diverse working styles, and engage in reflexive practice. The pedagogy embraces productive discomfort and emergence, shifting focus from mastery to inquiry and from fixed roles to dynamic collaboration. Using qualitative reflections, project outcomes and facilitator insights, this paper explores how First Shot(s) cultivates reflexivity, adaptivity and creative agility. It offers a model for reimagining classrooms as relational and experimental spaces for interdisciplinary learning.

16:25-16:50
95462 | *Exploring the Impact of Cultural Context in Management Education: A Pre- and Post-Course Assessment*
Salman Ali, Indian Institute of Management Kozhikode, India

In today's interconnected world, cultural agility is essential for effective cross-border collaboration. This study explores the role of experiential learning in developing cultural agility through the X-Culture Global Collaboration Project, which was run as a credited course for MBA participants. Participants engaged in global virtual teams to solve business challenges, promoting intercultural cooperation and enhancing key competencies. A pre- and post-project survey was conducted among over 100 participants to measure changes in cultural agility across dimensions such as tolerance for ambiguity, cultural curiosity, perspective-taking, and relationship-building. Findings indicate a significant improvement in overall cultural agility, with notable growth in cultural curiosity, perspective-taking, resilience, relationship-building, and communication styles (direct/indirect and task/relationship orientation). Additionally, participants demonstrated a shift towards collectivist tendencies and a more adaptable approach to time perception, reflecting increased flexibility in cross-cultural settings. However, aspects such as egalitarianism and cultural humility remained relatively unchanged. This study highlights the impact of immersive, team-based global projects in strengthening cultural agility, particularly in enhancing adaptability, diverse perspective-taking, and relationship-driven collaboration. It contributes to the discourse on experiential learning and global business education, offering insights into how structured international teamwork fosters essential cross-cultural competencies. Future research could examine the long-term effects of such interventions and compare outcomes across diverse participant groups.

16:50-17:15
96659 | *Coding Connections: Intercultural Competence Through Peer-Assisted Learning Among Digital Media and Technology Students*
Edward Bacon, Rangsit University International College, Thailand
Gary Ambito Torremucha, Rangsit University, Thailand

This study explores how peer-assisted learning (PAL) with Burmese international mentors contributes to the development of intercultural competence (IC) among Thai students majoring in digital media and technology. Grounded in Byram's model of IC and Vygotsky's Sociocultural Theory, the research engaged 30 undergraduates in a 10-week PAL program at a Thai university. Using pre- and post-program questionnaires alongside English language assessments, the findings revealed strong student satisfaction with the PAL sessions—particularly in terms of collaborative project work, cross-cultural communication, and problem-solving support. Participants reported perceived growth in intercultural sensitivity, confidence when working in multicultural environments, and greater openness to diverse perspectives—skills that are increasingly vital in globally networked technology fields. However, the program did not produce measurable gains in English proficiency. Nonetheless, the study underscores PAL's potential to promote intercultural learning and global readiness in STEM-related education, reinforcing the value of "internationalization at home." It recommends expanding PAL initiatives within digital and technological curricula to prepare students for global collaboration in the tech sector.

15:35-17:15 | Room 707 (7F)
Wednesday Onsite Parallel Session 4
ACE2025 | Education for STEAM
Session Chair: Tan Liang Soon

15:35-16:00
100687 | *The Effect of Executive Function-Based Teaching on Students' Physics Metacognition and Conceptual Understanding of Force*
Mohd Nor Syahrir Abdullah, Universiti Malaya, Malaysia
Mageswary Karpudewan, Universiti Sains Malaysia, Malaysia

Research suggests that the brain's executive function (EF) plays a role in metacognition and in the teaching and learning of the force concept in physics. In line with this suggestion, this study aimed to introduce an EF-based teaching strategy to teach force concepts and to evaluate its effectiveness on secondary school students' understanding of force and physics metacognition. This study employed an intervention mixed-method design that connected and embedded both quantitative and qualitative data. A total of 10 activities using the EF-based teaching strategy were implemented to teach the topic of force. Pre-test, post-test 1, and post-test 2 were administered for the quantitative assessment using the Force Concept Test (FCT) and Physics Metacognition Inventory (PMI). Additionally, interviews and document analysis were conducted to support and enrich the quantitative findings on students' understanding of force and physics metacognition. Repeated measures ANOVA and MANOVA were performed to examine changes in the dependent variables. Significant changes were observed in students' understanding of force ($F = 87.773$, $p = 0.00$) and in physics metacognition ($F = 31.8$, $p = 0.00$, $\eta^2 = 0.52$), including both of its subscales. The qualitative findings from interviews and document analysis further supported and explained these quantitative results. Overall, the findings indicate that EF plays an important role in enhancing students' understanding of force and that EF-based teaching strategies can be an effective approach for improving both conceptual understanding of force and physics metacognition.

16:00-16:25
97243 | *Exploring Engineering Identity Among Tenth Grade Students Through Engineering Maker Education: A Mixed Method Study*
Salim Alharmali, Sultan Qaboos University, Oman

Revealing engineering identity in pre-university education is crucial for systematically and deliberately directing students' engineering inclinations in higher education. Career counseling at Omani schools uses standardized assessments to figure out students' engineering identities, assisting them in making informed decisions on the pursuit of engineering majors. This study utilized a mixed-method approach with a quasi-experimental design to explore engineering identity through the development of educational modules, which require students to engage in engineering maker education to promote tangible products, models, as well as electrical and mechanical systems that adhere to criteria and constraints. The study sample consisted of 29 male and 37 female 10th-grade students. Quantitative data were gathered via the four-dimensional Engineering Identity Scale (Choe & Borrego, 2019). The Cronbach's alpha was determined to be 0.93. It was utilized in both pre-tests and post-tests. MANCOVA revealed statistically significant differences favoring male students in the development of their overall engineering identity across four domains: engineering interest, engineering competence, engineering recognition, as well as interpersonal skills competence, with a medium effect size. The observation report and focused interview findings indicated that male students exhibited a more favorable response and demonstrated a stronger preference for educational makers than female students, supporting the quantitative finding. The study highlighted the importance of investigating students' engineering identities before college enrollment, indicating that students may demonstrate heightened interest in engineering when engaged in a creative environment that nurtures their interests, exemplified by the Engineering Maker Education approach.

16:25-16:50
101181 | *A Study on Indicators of Art-Centered STEAM Education*
Hsiu-Chu Hsu, National Dong Hwa University, Taiwan

The purpose of the research is to develop indicators that highlight the role of the Art in STEAM learning. By doing so, the study seeks to provide educators and policymakers with tools to recognize, evaluate, and enhance the artistic and creative dimensions of Art-centered STEAM curricula. Methodologically, the study employed a three-stage design: (1) a systematic literature review to identify dimensions of Art-centered STEAM learning, (2) expert consultation through the Delphi method to establish consensus on key indicators of Art-centered STEAM, and (3) an application of the proposed indicators to evaluate curriculum cases developed and implemented in elementary schools, including an Eastern Taiwan indigenous curriculum and another Southern Taiwan food design and agriculture curriculum. These curricula were selected for their cultural relevance and interdisciplinary scope, offering authentic contexts for examining the feasibility and clarity of the proposed indicators. Preliminary results indicate that three categories of Art-centered STEAM indicators—creative expression, interdisciplinary integration, and aesthetic awareness—play critical roles in highlighting the distinct contributions of the Art within STEAM contexts. The findings also demonstrate that these indicators not only capture the artistic and integrative aspects of learning but also provide insights into how culturally relevant themes enrich interdisciplinary education.

16:50-17:15
96260 | *Integrating Mathematical Modelling in Singapore's Mathematics Curriculum: The Role of Teacher Professional Learning*
Tan Liang Soon, Academy of Singapore Teachers, Singapore

This presentation explores the challenges and opportunities in integrating mathematical modelling into Singapore's mathematics curriculum, highlighting the role of teacher professional learning in supporting its implementation. Although the curriculum emphasizes applying mathematical concepts and modelling, the effectiveness of implementation varies across schools. To address this, a structured professional learning model grounded in Network Learning Communities (NLC) (Timperley et al., 2017) is adopted, particularly for teachers serving as advisors for the International Mathematical Modeling Challenge (IMMC). NLCs promote collaborative learning and the sharing of knowledge and strategies, fostering a culture of teacher ownership and leadership as championed by the Academy of Singapore Teachers. A key focus of the initiative is the use of reflection-in-action and reflection-on-action (Schön, 2017) to help teachers critically evaluate and improve their instructional practices. Through these reflective processes, teachers refine their approach to designing and facilitating mathematical modelling learning experiences. Three key networked learning enablers are highlighted: 1. IMMC Workshops, which equip teacher advisors with essential knowledge and pedagogical skills in mathematical modelling 2. Hands-on Evaluation of IMMC Team Reports, providing teachers with the opportunities to assess student work, helping them better understand effective modelling practices and areas for improvement. 3. IMMC Annual Sharing, a platform for teachers to exchange experiences, best practices, and tools like AI-assisted collaborative coding and reporting. By leveraging these mechanisms, the initiative enhances teachers' practice to integrate mathematical modelling into their classrooms in a more consistent and effective manner.

15:35-17:15 | Room 708 (7F)
Wednesday Onsite Parallel Session 4
ACE2025 | Foreign Languages Education and Applied Linguistics
Session Chair: Khaled Karim

15:35-16:00
98623 | *Empowering A2-Level EFL Learners Through AI Feedback: From Multi-Tool Practice to Speaking Fluency*
Hui-Hsiang Chang, Wenzao Ursuline University of Languages, Taiwan

This study addresses the challenges faced by A2-level university students in English speaking, including low confidence, speaking anxiety, and difficulty expressing themselves fluently. Guided by the concept of learner autonomy, an AI-integrated speaking curriculum was developed to offer progressive, low-pressure practice with real-time feedback. Post-class self-directed tasks extended learning beyond classroom boundaries. Over the semester, students engaged in ten SPT-based diagnostic sessions that diagnosed their proficiency with immediate feedback on pronunciation, intonation, and accuracy. Additionally, ten MyET assignments offered diverse real-life dialogues beyond textbook content, providing immediate feedback on pronunciation and intonation. A paired-sample t-test showed significant gains in speaking performance ($t(19)=-6.08$, $p<.001$). Survey items also demonstrated high internal consistency (SPT $\alpha=.888$; MyET $\alpha=.858$). Whisper was utilized for post-class pronunciation training, helping students build speaking confidence by practicing reading passages or dialogues with immediate accuracy feedback. Meanwhile, ChatGPT supported in-class role-play activities, offering a low-pressure environment for students to practice individually with AI feedback or receive feedback on pair dialogues. Questionnaire results showed strong reliability (Whisper $\alpha=.948$) and significant correlations between AI feedback and gains in speaking confidence (e.g., $r=.898$ for Whisper, $r=.647$ for ChatGPT). Notably, students' open-ended reflections revealed reduced speaking anxiety and a stronger willingness to continue practicing English beyond class.

16:00-16:25
101364 | *Mitigating Japanese EFL-Student Use of AI in Written Assessment*
Aaron Ward, Toyo University, Japan

Recently, artificial intelligence (AI) use in society has been a hot topic. This discussion extends this to the use of AI and academic integrity in educational assessment, and this also applies to English-as-a-Foreign-Language (EFL) writing tasks. While the use of AI by Japanese EFL students in academic writing classes is still relatively low, its expedience appears to hold appeal for some students. However, AI's implications for EFL students are perhaps more problematic as, in addition to being a form of academic dishonesty, EFL students often struggle to understand or explain generated content, making it much easier for teachers to identify. Ethical considerations aside, the use of AI also distorts external perceptions of EFL proficiency that could create serious difficulties for students in future employment. The current presentation outlines an understanding of what the three main forms of AI actually do, and how these manifest in 'AI-enhanced' EFL written work. Particular attention will be given to large-language and generative AI models, which are ostensibly anonymizing plagiarism tools in-and-of themselves, the development of which has already been subject to copyright legal-challenge. Further, a framework will be given for identifying and managing the use of AI in out-of-class written assessment. Some thoughts will also be given on the longer-term possibilities of the role of AI in EFL education as the technology inevitably becomes more sophisticated, and how this could affect long-term learning. Finally, the wider social implications of the 'epistemic bomb' that reliance on AI in education may create will be discussed.

16:25-16:50
97116 | *Optimize Online Reflective Writing Tasks Through Padlet*
Charo Mae Lampad, Don Bosco Technical Institute of Makati, Philippines

With the usual set up of online teaching, monitoring the students' conditions whether academically or emotionally have been a challenged to educators. Hence, intensifying the use of tasks that would allow learners to share their thoughts and feelings while taking a certain course or subject is encouraged. However, merely requiring students to write their experiences seemed to be inadequate. Hence, this study focused on Optimizing Online Reflective Writing Tasks through Padlet. It aimed to describe the use of Padlet as a platform to enhance the reflective writing tasks of students, online. Framed from the experiential learning theory and the online interactional learning theory (2005), this study involved Languages and Literature students whose age ranged from 17 to 19 years old (SHS to College Freshmen). Purposive sampling was the technique applied in selecting the respondents. The researcher determined the rate of students' compliance with regard to reflective writing tasks prior and after the use of Padlet, and analyzed them through quantitative method. While the students' perceptions prior and experiences after the intervention were also described qualitatively. In conclusion, the rate of students' compliance to reflective writing tasks increased while students' perceptions and experiences revealed the following attributes of Padlet: "interactive", "relaxing designs" and "ease of use" as indicators of effectiveness as a platform for reflective writing. It was recommended that Language teachers encourage reflective writing in between lessons in an online class and optimize it through the use of Padlet.

16:50-17:15
98329 | *Exploring Cognitive Processes While Incorporating Written Feedback: Insights from an Eye-tracking Study of Student Revision*
Khaled Karim, American University in Dubai, United Arab Emirates

The effectiveness of written corrective feedback (WCF) continues to be debated, largely due to inconsistent findings across studies. While prior research has often focused on whether WCF improves grammatical accuracy, few studies have investigated how students actually engage with and process feedback during revision. This study addresses both the effectiveness of different types of WCF and the ways students process feedback in real time. The first goal was to examine the impact of three types of focused WCF- direct correction, underlining only, and underlining with metalinguistic explanation- on learners' accuracy in using prepositions of place. The second goal was to explore how students processed this feedback while revising their writing, using eye-tracking technology to capture their visual attention patterns. Forty-five first-year Arab university students were randomly assigned to one of the three feedback groups (n=15 per group). Each student completed two descriptive writing tasks over a two-week period. After receiving feedback, they viewed their corrected texts on a screen connected to an eye-tracking-device, which recorded their eye movements during reading. They were then asked to revise the texts by hand. One week later, they completed a new writing task to assess the delayed effects of the feedback. ANOVA results showed that all three groups significantly improved their grammatical accuracy. The delayed post-test also indicated that these improvements transferred to new writing. Eye-tracking data revealed that students paid close attention to the feedback, and there was a positive correlation between the time spent viewing feedback and the accuracy of their revisions.

Notes

17:30-18:45 | Room 601 (6F)

Wednesday Onsite Parallel Session 5

ACE2025 | Educational Policy, Leadership, Management and Administration (Panel)

Session Chair: Nancy Pratt

10:55-12:10

97003 | *A Clarion Call to Build a Strong Coalition that Reaffirms and Advances the University as a Global Public Good*
Nancy Pratt, Cleveland State University, United States
Wendy Green, Cleveland State University, United States
Marius Boboc, University of Missouri-St. Louis, United States

The U.S. higher education landscape is experiencing profound disruption. Once regarded as a public good and global partner in innovation, higher education institutions (HEIs) now face rising political hostility, public skepticism, and declining enrollment. This presentation examines how higher education leadership must evolve in a climate shaped by ideological volatility, reduced access to international talent, and policy-driven assaults that are eroding the foundational structures of university life and learning. We explore the shifting public and political perceptions of HEIs, which have moved from being seen as engines of civic advancement to being criticized as elitist and ideologically biased. This change has been driven by rising tuition, doubts about alignment with career outcomes, and increasingly polarizing rhetoric. Yet HEIs continue to contribute globally through efforts in health, economic mobility, and international scholarly collaboration. In response, we propose a leadership agenda focused on coalition building and cultural transformation. This includes reframing stakeholder engagement, advancing inclusive and ethically grounded leadership practices, and reaffirming higher education's role as a global public good. The session will provide actionable strategies for addressing governance challenges, aligning institutional purpose with public need, and restoring trust. Attendees will be invited to contribute perspectives to a post-conference publication that will explore collective responses to the systemic threats facing higher education leadership today.

17:30-18:45 | Room 603 (6F)
Wednesday Onsite Parallel Session 5
ACE2025 | Innovative Technologies in Education
Session Chair: PG Schrader

17:30-17:55
96284 | *Stars VR9 – Strategic Teaching of Astronomy: Reaching Space Thru Virtual Reality in Grade 9 Science*
Sherryl Montalbo, Batangas State University, Philippines
Baby Apple Perada, Batangas State University, Philippines
Kristine Hazel Peñaverde, Batangas State University, Philippines
Anthony Parayno, Batangas State University, Philippines

Astronomy explores celestial bodies and the laws that govern the universe, but its abstract concepts often challenge student understanding and interest. Traditional teaching methods frequently fall short in effectively conveying these ideas, leading to disengagement. This study developed and evaluated a virtual reality (VR)-integrated instructional material for Grade 9 Science, focusing on content alignment, VR integration, perceived usefulness, ease of use, and behavioral intention to use. It also explored students' experiences in learning astronomy through VR. A mixed-methods design was employed. Data were gathered using standardized and researcher-made questionnaires and interviews. Participants included Grade 9 science teachers and one intact Grade 9 science class from Sta. Rita National High School, Division of Batangas City, Philippines. Instrument reliability was confirmed using Cronbach's alpha, and quantitative data were analyzed using weighted mean. Findings showed that the material was highly aligned with the Department of Education's Most Essential Learning Competencies (MELCs). Students perceived the VR material as effective, user-friendly, and engaging. It fostered strong behavioral intentions to continue its use in studying astronomy. The immersive environment improved comprehension, increased student motivation, and enhanced classroom interaction. The study concludes that VR integration in astronomy instruction is a promising approach for improving conceptual understanding and student engagement. It recommends the use of VR-based tools in teaching other abstract science topics to further support meaningful learning.

17:55-18:20
101343 | *From Adaptation to Engagement: Evaluating the Effectiveness of an AI-Based Personalised Learning Platform in Physics Education*
Bala Murali Tanimale, Seameo Recsam, Malaysia

This study explores how a personalised learning platform powered by AI can support secondary school students in physics by tailoring instruction to their individual needs. A total of 120 students took part in the study, with one group using the adaptive platform and another following traditional classroom instruction. The study used a mixed-methods approach, combining pre-test and post-test performance data with insights from student interviews and focus groups. The findings showed that students using the adaptive platform achieved higher levels of conceptual understanding, with a paired sample t-test score 7.55 points higher than those of the control group. These gains were closely linked to features such as adaptive quizzes, individualised lesson pathways, and progress-tracking tools, which allowed learners to monitor and adjust their learning more effectively. Students frequently described the platform as providing "timely feedback" and "guidance at my own pace", suggesting that personalisation helped reduce frustration and sustain motivation. Focus group discussions also revealed that learners in the experimental group were more engaged, often citing the platform's gamified elements and interactive content as motivating factors. While students recognised these advantages, they also identified challenges, particularly technical issues and a desire for a broader range of content. Overall, the study highlights the potential of AI-driven adaptive learning to improve both immediate academic outcomes and the development of self-regulated learning habits. At the same time, it emphasises the importance of balancing technological innovation with thoughtful instructional design to ensure accessibility and sustained effectiveness in classroom practice.

18:20-18:45
97070 | *A Video Game Telemetry Project: Modeling Data Science and Machine Learning in Educational Research*
PG Schrader, University of Nevada, Las Vegas, United States
Mark Carroll, University of Nevada, Las Vegas, United States

This paper models a process for exploring questions situated in digital video games and broader educational contexts. Findings from an ongoing study are used to outline a process to extract data from the encapsulating social media ecosystem using applied data science, artificial intelligence (AI), and machine learning (ML) techniques. Previous efforts involving Delphi techniques to examine player behavior and social discourse across online game environments (Schrader, Carroll, McCreery, & Head, 2019) tend to be cumbersome and laborious. Alternatively, educational data science techniques, in conjunction with AI and ML, provide mechanisms to triangulate data from three distinct sources: player discussions about performance on social media, game telemetry data, and game outcomes. In this study, researchers applied supervised and unsupervised machine learning approaches alongside statistical and learning analytics methods to extract and analyze behavioral patterns to evaluate if players' social media assertions about success aligned with the actions they take (Baker & Siemens, 2014; Siemens, 2013). Findings reveal that players' claims often reflect personal anecdote rather than observable behaviors that are linked to success. This work carefully outlines the integrated process (e.g., ML with public APIs) as a model for educational researchers to engage in similar studies. We advocate for broader utilization of data science, AI, and machine learning in research contexts that represent large, complex, but publicly available datasets (e.g., telemetric user data). This session serves as an entry point for researchers who are new to AL and ML, especially those investigating learning in contexts with high-volume data streams.

17:30-18:45 | Room 604 (6F)
Wednesday Onsite Parallel Session 5
ACE2025 | Higher Education
Session Chair: Steen Baagøe Nielsen

17:30-17:55
101168 | *A Preliminary Study on University Choice Among High School Graduates in Taiwan*
I-Hui Lin, National Sun Yat-sen University, Taiwan

Higher education is generally considered to have positive impact on social mobility, and consequently, access to higher education opportunities has drawn significant attention. Economic and social factors—such as the financial costs of studying away from home, the maintenance of emotional ties and mutual support among family and peers, and the adjustment to new living environments—often constrain some high school graduates to choose nearby universities. These constraints highlight the significance of the spatial distribution of higher education opportunities. This study examines the case of university choice among high school graduates in Taiwan. Since the 1990s, Taiwan has undertaken a substantial expansion of its higher education sector to increase participation rates. However, much of this expansion has occurred within the private and technical–vocational sectors, while resources remain disproportionately concentrated in public comprehensive universities. Combined with labor market preferences, these dynamics raise pressing questions regarding inequality in access to higher education. Using data from a nationwide longitudinal survey conducted by Academia Sinica, this research analyzes university choices made by high school graduates between 2000 and 2020. Regression models are employed to assess the effects of university proximity on choice, controlling for both individual and contextual characteristics. In addition, geographic information system (GIS) techniques are applied to examine the spatial distribution of university choices across different institutional types (public vs. private, comprehensive vs. technical–vocational). This approach enables a comparative analysis of regional disparities in university choice and provides insights into the current spatial distribution of higher education opportunities in Taiwan.

17:55-18:20
97264 | *An Analytical Study on the Utilization of Learning Management Systems in Higher Education Institutions: Perspectives from the Philippines*
Mellie Guico, Batangas State University-The National Engineering University, Philippines

This study determines the extent of utilization of the Learning Management System (LMS) in terms of curriculum, pedagogy, and evaluation. It also compares the perspectives of administrators and faculty members, identifying the problems and challenges associated with LMS utilization. A descriptive research design was employed, utilizing a researcher-developed questionnaire as the primary data collection tool, supplemented by interviews and focus group discussions. The study involved 182 faculty members and 29 administrators, including Deans, Associate Deans, Department Chairpersons, and ICT Heads/Coordinators from higher education institutions (HEIs). Statistical analysis methods such as weighted mean, frequency, percentage, and t-test were used to interpret the collected data. The findings indicate that the LMS serves as an interactive platform designed to efficiently manage lesson content, allowing teachers and students to access and utilize educational materials via digital devices and the internet. HEIs integrate LMS across various media platforms to create interactive and engaging lesson presentations while maintaining student records. However, common challenges in LMS utilization include insufficient time for teachers to plan technology-integrated lessons and resistance to change. Additionally, accessibility to ICT resources and the sustainability of training in digital literacy and pedagogy remain significant concerns. To address these issues, a proposed management plan has been developed, outlining key activities and strategies aimed at enhancing curriculum, pedagogy, and evaluation for the sustainable use of LMS in HEIs.

18:20-18:45
97510 | *University Reform and Its Potential, Unintended Implications for Student Competencies and Employability*
Steen Baagøe Nielsen, Roskilde University, Denmark
Sine Lehn, Roskilde University, Denmark

This paper presents a critical examination of the largest national reform of the system of higher education (HE) in Denmark in 25 years. The objective is to examine how the political ideas and values that have influenced such a significant, comprehensive reform may possibly lead to unintended or even counterproductive outcomes for student learning, competencies, and employability. The paper critically unravels the dominant political constructions of student learning and labour market orientation underpinning the reform, through the analysis of selected policy reform documents published in the period 2022-2025 – leading up to the reform. The analysis draws inspiration from Carol Bacchi's "What's the problem represented to be?" approach to policy (Bacchi 2009, Bacchi & Goodwin 2016). The thematic focus is on the political attempt to transform the obligations of the university from classic academic proficiency towards an increased focus on qualifications and employability, which links to a growing priority given to knowledge and student learning drawing on an applied science model. The reform may inadvertently disrupt well-established educational measures and student practices that have effectively addressed the issue of employability. The analysis will contribute to the research field of higher education and professionalization by offering updated knowledge on educational development in accordance with the intentions of the Bologna Declaration (1999). It will address the changing role of universities in Northern Europe through the growing political focus and control.

17:30-18:45 | Room 605 (6F)
Wednesday Onsite Parallel Session 5
ACE2025 | Educational Policy, Leadership, Management and Administration
Session Chair: Blenn Nimer

17:30-17:55
96492 | *Structure, Agency, and Culture: Examining the Influence of Organizational Culture in Succession Planning in Higher Education Institutions*
Ferdinand Rellorosa, Ateneo De Manila University; Southern Luzon State University, Philippines

Succession planning (SP) is vital for leadership continuity and institutional sustainability (Ahmad et al., 2020; Rothwell, 2005). While largely studied in corporate settings, its application in higher education institutions (HEIs) remains underexplored, particularly in state universities and colleges (SUCs) in the Philippines. This research examines how organizational culture influences SP in SUCs, identifying structural and cultural factors that affect leadership transitions. Using qualitative methods, specifically thematic analysis, this study investigates the experiences and perspectives of SUC leaders at the middle management, focusing on leadership selection processes, bureaucratic constraints, and political dynamics that shape SP strategies. Findings reveal that formal succession policies are often absent, leaving leadership transitions vulnerable to inconsistencies and external political influences. Additionally, the study highlights how SUC leaders navigate institutional challenges, acknowledging gaps in existing policies while advocating for more structured and merit-based succession strategies. The role of organizational culture—shaped by hierarchy, internal politics, and bureaucratic regulations—is found to significantly impact SP outcomes. By contextualizing SP within Philippine SUCs, this study contributes to leadership development discourse in HEIs and informs policy recommendations aimed at fostering sustainable governance practices. The research underscores the necessity of aligning SP with institutional culture to ensure long-term leadership stability, advocating for frameworks that balance organizational values with strategic succession mechanisms.

17:55-18:20
95519 | *Not All Teachers Act as the Same Arbiters: Why Urban and Regional Teachers Enact the Same National Language Policy Differently*
Jasper Hsieh, The University of New South Wales, Australia

This study examines how teachers in urban and regional areas respond to a national-level language policy and planning (LPP) initiative. While previous research establishes teachers as final arbiters in interpreting and implementing LPP, it often treats them as a homogeneous group, overlooking variations in background, such as school location, experience level, and employment status. As part of an ongoing ethnographic study on Taiwan's Bilingual 2030 Policy (2023–2030) with a focus on teachers' diversity, this paper analyses data from 15 teachers collected between 2023 and 2024. It explores why urban and regional teachers enact the same LPP differently and how these enactments materialise at the institutional level. Findings indicate that regional schools' need to boost enrolment and disparities in access to high-quality professional development contribute to English monolingual-oriented LPP in regional areas, while urban schools adopt a more multilingual approach. This study argues that once ideological and implementational spaces are shaped by top-down LPP, they are difficult to reset. However, sustained, dialogical, and research-informed professional development can help reopen these spaces, ensuring the policy's long-term viability.

18:20-18:45
94922 | *Enhancing Student Engagement Through Effective Instruction*
Blenn Nimer, Notre Dame of Kidapawan College, Philippines

Student engagement is essential for effective learning, fostering motivation and academic success. However, many students face challenges due to disinterest or ineffective instructional methods. This study employed a quantitative causal research design to explore the influence of instructional effectiveness on student engagement. Two primary constructs were examined: instructional effectiveness — comprised of pedagogical competence, interpersonal and organisational competence, professional image, and overall presence — and student engagement, which includes cognitive, affective, behavioural, social engagement, and disengagement. The research utilised the Instructional Effectiveness and Student Engagement Models developed by Nimer (2024), validated through factor analysis and reliability testing. The survey was administered to 556 students, comprising 306 college and 250 senior high school, employing stratified sampling techniques. Multiple Linear Regression Analysis was conducted to evaluate the influence of instructional effectiveness on student engagement. Key findings revealed that teacher characteristics significantly affect student engagement across various dimensions, with Overall Presence emerging as a critical predictor. Instructional Skills and Professional Image also substantially contributed to engagement. Teachers can create more engaging and effective learning environments that promote student success by focusing on their overall presence, instructional skills, professional conduct and freshness, and content knowledge and expertise. Based on the findings, a strong teacher presence, characterised by effective communication and engaging teaching methods, fosters deep thinking, active participation, positive emotions, and positive social interactions among students. Moreover, effective instructional strategies, such as active learning techniques and real-world applications, can enhance student engagement and motivation.

17:30-18:45 | Room 607 (6F)
Wednesday Onsite Parallel Session 5
ACE2025 | Education, Sustainability and Society
Session Chair: Deal Demetillo

17:30-17:55
96301 | *Digital Literacy Education for Political Communication Ethics and Culture in Digital Space: Reflections After the 2024 Indonesian Simultaneous Elections*
Muhammad Yunus Zulkifli, Universitas Indonesia, Indonesia

The rapid development of information technology has given rise to social media as a new space for shaping public opinion, particularly in political participation and democratic practices. However, instead of strengthening democracy, digital media in Indonesia has often worsened public communication through the spread of disinformation, hate speech, and identity politicization. This became especially visible during the 2019 Indonesian Election and resurfaced in the 2024 Indonesian Simultaneous Elections, marked by sharp political polarization fueled by unchecked information flows on platforms like Facebook, X (Twitter), Instagram, and TikTok. From a communication education perspective, digital literacy involves not only technical skills to access and manage information but also critical abilities to evaluate, create knowledge, and engage ethically in digital spaces. The four pillars of digital literacy introduced by "Siberkreasi" by the Indonesian Ministry of Communication and Information (Kominfo)—digital skills, digital culture, digital ethics, and digital safety—form a key foundation for fostering civilized political communication. In particular, digital culture and digital ethics play vital roles in shaping national character, reinforcing Pancasila values, and upholding ethical standards in free expression. This study reflects on the practice of digital literacy during the 2024 Indonesia Simultaneous Elections and identifies key lessons for strengthening communication education moving forward. By making digital literacy a strategic educational agenda, Indonesia's younger generation can be better equipped to enhance democratic practices through ethical, inclusive, and knowledge-based political communication in today's dynamic digital era.

17:55-18:20
100962 | *Schooling a Siege Society: Civic Identity, Political Socialization, and Youth in Russia's 2023 Grade 11 History Textbook*
Eduard Sviridenko, Western University, Canada

This paper analyzes Russia's state-mandated Grade 11 history textbook, "History of Russia: 1945 to the early 21st century" (2023), as a curricular instrument that reshapes civic identity and normalizes conflict in everyday school practice. Drawing on memory politics scholarship and critical discourse analysis, the study examines chapters on the post-Soviet period and assignment prompts that portray the West and "Nazi" Ukraine as enduring enemies, elevate heroic sacrifice, and position students as heirs to a besieged nation. Through qualitative content analysis and targeted comparisons to earlier Russian textbooks, the study shows how a singular narrative is enforced across the system, with classroom tasks that reward assent and discourage open inquiry. The findings trace how this narrative migrates from national myth to community life through schooling, influencing social cohesion, youth attitudes toward dissent, and the boundaries of legitimate participation in public debate. The paper argues that the textbook serves as a form of political socialization through its curriculum, narrowing the space for deliberation while presenting loyalty as a civic virtue. The study concludes with actionable implications for educators and community partners, including assessment designs and dialogic media-literacy activities that enable students to critically examine politicized narratives, foster critical thinking, and cultivate a pluralistic civic culture in and beyond the classroom.

18:20-18:45
96137 | *Becoming a Global Citizen: Lived Experiences and Perceptions of Student Leaders in a Philippine Higher Education Institution*
Deal Demetillo, Cebu Institute of Technology University, Philippines
Elcasmer Acedo, Cebu Institute of Technology University, Philippines

This phenomenological study explores how Cebu Institute of Technology University (CIT-U) student leaders understand and embody Global Citizenship Education (GCED) within their academic and organizational roles. Anchored in critical pedagogy and transformative learning theory, the research investigates the lived experiences of ten student leaders, focusing on their perceptions, practices, and the institutional, cultural, and personal factors influencing their engagement with GCED. Semi-structured interviews with purposively selected student leaders were conducted, and thematic analysis was employed to identify emergent patterns. Findings reveal that while CIT-U student leaders demonstrate strong leadership competence through active involvement in various organizations, their awareness and application of explicit GCED principles remain largely implicit, often manifesting more through general values of service and community engagement rather than a conscious framework. CIT-U's commitment to nurturing global citizenship is evidenced by its dedicated GCED Action Hub and relevant institutional programs. The GCED Action Hub offers leadership training, SDG-themed activities, and other initiatives, while programs such as the mandatory CWTS course for first-year students also provide significant service-learning experiences. These institutional efforts collectively provide meaningful platforms for students to engage with global citizenship values and develop a sense of civic identity, although the connection to formal GCED concepts is not always explicit for the students within all contexts. This research highlights the need for a more intentional and explicit integration of GCED frameworks within leadership development programs, reinforcing the university's mission to cultivate globally minded and socially responsible student leaders prepared to contribute meaningfully to local and global communities.

17:30-18:45 | Room 702 (7F)
Wednesday Onsite Parallel Session 5
ACE2025 | Innovative Technologies in Education
Session Chair: Jutharat Sunprasert

17:30-17:55
101387 | *Enhancing Secondary Mathematics Learning Through STEAM2C: Creative Assessment with Graphing Technology*
Jeyaletchumi Muthiah, Seameo Recsam, Malaysia

This study investigates the integration of STEAM2C (Science, Technology, Engineering, Arts, and Mathematics with Creative and Critical Thinking) into the teaching and assessment of Graphs of Functions among secondary school students in Southeast Asia. The project sought to move beyond traditional instruction and rote-based evaluation by incorporating alternative assessments that emphasize creativity, reasoning, and application, supported by digital graphing technologies such as Desmos, GeoGebra, and graphing calculators. The intervention began with a two-day professional development workshop for mathematics teachers, which prepared them to implement inquiry-based learning activities in their classrooms. The core activity was a student-led creative graph design project, where learners developed visually compelling and mathematically accurate representations of functions. These artifacts were assessed using a structured rubric highlighting mathematical reasoning, design aesthetics, and reflective thinking. Data collected through teacher interviews, student reflections, and rubric-based evaluations revealed that the STEAM2C approach significantly enhanced engagement, deepened conceptual understanding, and encouraged students' creative self-expression. Teachers valued the framework as a promising alternative assessment method that aligns with 21st-century learning competencies, while also noting the importance of strong stakeholder support and alignment with national curricula to ensure sustainability. Overall, the research demonstrates how combining creative pedagogy with graphing technology can enrich mathematics education by promoting higher-order thinking, innovation, and authentic assessment practices. The outcomes suggest that STEAM2C provides a replicable model for integrating creativity and critical thinking into mathematics classrooms across diverse educational contexts.

17:55-18:20
101613 | *Development of a STEM-PjBL Teaching and Learning Process Using the Engineering Design Process (EDP) in a Project-Based Course for Grade 11 Students*
Jutharat Sunprasert, King Mongkut's University of Technology Thonburi, Thailand
Tas Yusoontorn, King Mongkut's University of Technology Thonburi, Thailand
Shinichiro Mito, King Mongkut's University of Technology Thonburi, Thailand

This study aimed to develop an instructional model for the "Project" course offered to Grade 11 students in the Automation Engineering program at KOSEN KMUTT. The model integrates STEM-PjBL (Science, Technology, Engineering, and Mathematics – Project-Based Learning) with the Engineering Design Process (EDP) to establish connections between steps of the EDP and disciplinary knowledge. Through this approach, students apply STEM knowledge in Problem Definition, Data Analysis, Design, Construction, Experimentation, and Refinement. The research was first implemented with the 3rd cohort of the program, during which data were collected using questionnaires and interviews. The findings identified three major challenges: (1) project topics were too narrowly defined, limiting access to relevant information; (2) the application of classroom knowledge to project work was limited, and (3) teacher support was inadequate. Consequently, student satisfaction was rated at a moderate to good level. Based on these findings, the instructional model was revised for the 4th cohort of the program in the following year. Key modifications included: (1) adapting project topics to align more closely with students' real-life contexts, (2) aligning the teaching of prerequisite content with the project timeline, and (3) providing increased teacher support through consultation and technical guidance. The revised model resulted in significantly higher levels of student satisfaction, particularly in project process management, with ratings improving to 'good' and 'very good'. Overall, the study demonstrates that integrating STEM-PjBL with the EDP effectively enhances teaching and learning in the 'Project' course and provides a practical framework for improving project-based education in engineering contexts.

17:30-18:45 | Room 703 (7F)

Wednesday Onsite Parallel Session 5

ACE2025 | Primary Education

Session Chair: Ho Hong Boby Ching

17:30-17:55

93754 | *Reading the World: Young Children's Responses to DEIJB Representations – Case Studies in Japan*
Luiz Garcia, Soka University, Japan

This research explores the implications of integrating young children into a critical praxis of DEIJB (diversity, equity, inclusion, justice and belonging) with a focus on activities that invite them to challenge social normative stereotypes based on race and gender within the context of Japan. It introduces data from fieldwork in an international school and in a few households in Tokyo, involving children aged 3 to 8, parents, teachers and educational leaders in the field of early childhood education. Psychological research shows that as early as age two and three, children start absorbing social constructed stereotypes (Clark, 1963) and by age six, girls think of brilliance as a male trait (Bian et al., 2017). Some fieldwork observations highlight examples of such awareness and analyze how it impacts children's sense of belonging or exclusion. The author also conducts action research that consists of interactive read aloud sessions of children's literature bringing diverse representations, but also stories and characters that challenge stereotypes, bringing opportunities for critical discussions and follow-up related activities. Based on the fieldwork results, the author argues that although representation efforts are necessary to introduce a world in which each child feels seen, heard and valued, they are not enough to help them resisting/combating persistent normative discursive practices that form the core of limiting their personhood and imaginative ambitions. This research claims that adjacent to representation efforts, a critical praxis based on Freire's "critical consciousness" (1970; 1973) proves to be a significant tool to foster DEIJB in early childhood education.

17:55-18:20

100430 | *Tasbih Huruf: Improving Islamic Education Achievement Among Jawi Remedial Pupils in Rural Areas*
Nazirah Jabri, Sekolah Kebangsaan Bekenu, Malaysia

This action research was conducted to improve the academic achievement of pupils in the Jawi remedial programme, which is a component of the Islamic Education subject. The intervention involved the application of the "Tasbih Huruf" method. A total of 20 Level 1 pupils from Sekolah Kebangsaan Bekenu, Subis, Sarawak, Malaysia was selected as the target group for this study. A preliminary survey using the Jawi Diagnostic Test served as the basis for the initial findings. The student who failed appeared confused when given the test. In order to better analyze the particular learning challenges these pupils were experiencing, the teacher regrouped them into smaller learning groups. The primary problem found was the pupils' incapacity to commit the Jawi single letters to memory, which in turn impacted their capacity to write and construct Jawi script. The "Tasbih Huruf" method was introduced by the teacher to assist pupils in learning and mastering these letters, and this was the main focus of the intervention. The goal of this tactic was to significantly improve their Jawi writing abilities. Additionally, the project involved working with teachers who served as facilitators, which enhanced the validity and credibility of the research process. Within the allotted time, the pupils' post-test performance significantly improved following the implementation of the intervention. Pupils' motivation and engagement were successfully raised by the "Tasbih Huruf" method, which also improved their recognition and memorization of the Jawi single letters.

18:20-18:45

97349 | *Uneven Gains: The Influence of Patterning Skills on Diverse Aspects of Children's Math Competence*
Boby Ho-Hong Ching, University of Macau, Macau

This intervention study investigated the influence of training in patterning skills on children's mathematical knowledge, specifically examining the effects of high versus low variability in teaching materials over a 6-session program. While previous research has shown that high variability significantly enhances patterning skills compared to low variability, it has focused on one-off online sessions, leaving a gap in understanding the transfer of these skills to broader mathematical concepts. Our study aimed to bridge this gap by evaluating the impact of varying levels of variability on three important areas of mathematical knowledge: calculation skills, conceptual understanding, and word problem-solving abilities. We found that high variability training was more effective than both low variability and control conditions in improving patterning and calculation skills, particularly for children with initially low patterning abilities. However, there were no significant differences in conceptual knowledge across the groups. In terms of word problem solving, high variability training excelled for direct problems, but did not yield the same benefits for indirect problems that required logical reasoning. Key strengths of this study include random assignment, pre-testing for all measures, and the control of covariates. Our findings suggest that while training in patterning skills can improve calculation abilities among children with low initial skills, the impact on conceptual understanding and word problem solving remains limited. While educators may focus on targeted strategies that enhance calculation skills through patterning training for some children, they should explore additional approaches to support conceptual understanding and problem-solving in early childhood mathematics education.

17:30-18:45 | Room 704 (7F)
Wednesday Onsite Parallel Session 5
ACE2025 | Teacher Education
Session Chair: Diane Watt

17:30-17:55
96392 | *Falling in Love with Teacher: Deconstructing the Patriarchal Classroom in Novel Fang Si-Chi's First Love Paradise*
Chen-I Chien, National Kaohsiung Normal University, Taiwan

The 2017 publication of Fang Si-Chi's First Love Paradise in Taiwan sparked #MeToo discussions in education and led to policy responses. In debates surrounding the 2024 implementation of the Gender Equity Education Act, critics argued that the new clause on "teacher-student relationships" restricts sexual autonomy. To respond to libertarian critiques, this paper revisits the novel to reveal how the inequity of power operates in teacher-student relationships. The study centers on two questions: Why fall in love with the teacher? And how can we fall in love with learning itself? Drawing on Kate Manne's concept of misogyny, the analysis reveals the three modes of domination employed by the teacher, Lee Guo-Hua. Then, through Merleau-Ponty's viewpoint of perception and Sartre's understanding of language, elaborate on the intersubjective relationship of conflict and cooperation. Furthermore, I will provide a framework of ethical response for imagining a pedagogical model that acknowledges students' bodily movements and desire projections. This paper calls for rejecting patriarchal classrooms that suppress bodily movement. It also argues against the romanticized fantasies of narrative seduction and stresses the need to clarify power boundaries in teacher-student relations. By doing so, it expands our understanding of misogyny in educational contexts and calls for pedagogical practices that cultivate students' engagement and love of learning itself, rather than misplaced affection for teachers who wield knowledge as power.

17:55-18:20
97156 | *Creativity in Action: Building Preservice Teachers' Creative Self-efficacy Through Lesson Design and Implementation*
Ladapa Ladachart, Chiang Mai University, Thailand
Luecha Ladachart, University of Phayao, Thailand

Creativity is a key characteristic for individuals navigating the modern world. As such, teachers are expected to foster creativity in students—directly, by explicitly setting creativity as a learning outcome, and indirectly, by modeling creative behavior in the classroom. In both cases, teachers require creative self-efficacy, or a belief in their own creative ability. Therefore, teacher education programs must cultivate creative self-efficacy in preservice teachers. However, longitudinal research tracking preservice teachers' creative self-efficacy over time remains limited. This study addresses this gap by examining the development of creative self-efficacy in 23 preservice teachers (3 male, 20 female) enrolled in a teacher education program in Thailand. Participants were assessed at the beginning and end of two courses—Course A and Course B—taken in the second and fourth years of the program, respectively. Course A was theory-oriented and focused on instructional methods and lesson planning. More practically, Course B emphasized the design and rehearsal of instruction. A Likert-type questionnaire served as the research instrument. Although the Shapiro-Wilk test indicated that the data were normally distributed ($p > .05$), Mauchly's test revealed a violation of the assumption of sphericity ($p < .05$). Consequently, the Friedman test with Conover's post-hoc comparisons was used instead of repeated-measures ANOVA to analyze the data. The results showed a significant increase in participants' creative self-efficacy during Course B, highlighting the importance of creativity in lesson implementation rather than in lesson design alone. Sources of creative self-efficacy are discussed from a theoretical perspective, and practical implications are proposed.

18:20-18:45
97266 | *Elementary Teacher Candidates Engage Critical Literacy Through Children's Literature*
Diane Watt, University of Ottawa, Canada

This qualitative study considers how student teachers use quality children's literature to promote critical literacy, while focusing on students' overall literacies development, in the Grades 4 to 6 classroom. This research draws on data from a major assignment in a required introductory Language Arts course, which is part of a Teacher Education Program at a large Canadian university. Teacher Candidates design a 3-title literature anthology around a social justice theme/issue such as war, immigration, racism, sexism, homophobia, poverty, and homelessness. They make links to the Ontario Curriculum and literacies pedagogies through specific suggestions on how they would use these texts to teach reading, vocabulary, writing, listening, speaking, and digital literacies. Through textual analysis of a sample of these anthologies, I highlight themes that were chosen, and the teaching and learning strategies Teacher Candidates propose to engage critical literacies perspectives while promoting overall literacy development. This analysis discusses how Teacher Educators can prepare new teachers to approach literacies education meaningfully, through the use of high-quality texts and real-world issues. Elementary-level students learn how to read and write through engaging with texts that help them to build knowledge and gain critical understanding of themselves, others, and the world.

17:30-18:45 | Room 705 (7F)
Wednesday Onsite Parallel Session 5
ACE2025 | Curriculum Design and Development
Session Chair: Gilfred Acierto

17:30-17:55
98714 | *Bridging the Education Divide: A Pathway to Inclusive Learning in Pakistan*
Zubair Abdullah, American Foundation School Karachi, Pakistan

Pakistan's education system faces a significant divide between elite international curricula and resource-constrained local systems, resulting in unequal access to quality learning. This paper explores strategies for creating an inclusive educational framework that bridges this gap. Drawing on three decades of experience in academic leadership and classroom practice, the study critically examines disparities in curriculum design, teacher training, and technology integration. Using qualitative data from school observations, teacher interviews, and policy reviews, the research identifies key barriers such as socio-economic inequity, lack of critical thinking in traditional curricula, and limited digital infrastructure. The paper proposes a pathway for harmonizing local and international standards through competency-based learning, teacher professional development, and scalable digital solutions. By adopting global best practices while contextualizing them for Pakistan's socio-cultural realities, the study advocates for a unified, equitable education model. This approach not only addresses the structural divide within Pakistan but also contributes to the broader discourse on inclusive education in developing countries.

17:55-18:20
97537 | *Curriculum Design for Residential Assistant Training Using Situated Learning*
Tai Chong Toh, National University of Singapore, Singapore

A supportive residential living environment is critical in ensuring students' well-being and safety whilst living on campus. As such, Universities have established Residential Life (RL) teams comprising staff and students to take on varied roles, including pastoral support, community building, and crisis management. While residential staff may be familiar with the processes, student Resident Assistants (RAs) need to be trained since they are new to the role. When I inherited the emergency management training, I noticed that the RAs were disengaged and their decisions relied heavily on their judgments. To overcome these challenges, I introduced a pedagogy to enhance my RAs' learning and performance. The situated learning theory posits that learning is a social process that is more effective when it takes place in authentic contexts and activities. To enable situational learning, the curriculum should be 1) scaffolded, 2) authentic, 3) collaborative and reflective, and 4) assessed. This presentation will illustrate how situated learning was applied to RA training. Through student surveys and observations, the findings suggested that the revised curriculum improved student learning. The RAs reported that the training was adequate and reported significantly higher knowledge and confidence in handling emergencies. They felt more supported by the residential staff and appreciated the transparent discussion and regular feedback within the team. Overall, the findings supported the applicability of situated learning theory in residential training programmes.

18:20-18:45
96245 | *Tracer Study of the BSBA Major in Marketing Management Graduates of a State University in the Philippines: Basis for Curriculum*
Marife Acierto, Polytechnic University of the Philippines, Philippines
Gilfred Acierto, Polytechnic University of the Philippines, Philippines

One of the thrusts given to every higher academic institution in the Philippines is geared towards the delivery of quality higher education to its stakeholders particularly focusing to their designed curriculum. This endeavor is conducted to trace the employability status of the BSBA marketing management graduates of a State University in the Philippines from the school year 2018-2022. A quantitative research methodology was used in the study using the standard tracer study questionnaire form of the Commission of Higher Education (CHED). Based on the findings, most graduates are female, unmarried and regular or permanent employees. Most of the participants are employed in rank-and-file or clerical positions whose monthly incoming ranges from P10,000 to less than P15,000. Communication skills were the competencies gained by the graduates that are useful to their present jobs, followed by problem solving skills and critical thinking skills. It was also mentioned that most of the respondents experienced that their curriculum in college was relevant to the first job. The researchers recommend that continuous improvement to the curriculum will benefit the employability status of graduates by meeting the industry expectations.

17:30-18:45 | Room 707 (7F)
Wednesday Onsite Parallel Session 5
ACE2025 | Career Education
Session Chair: Terrence Chong

17:30-17:55
96391 | *Conceptualising Mental Models of Work: An Exploration of Young Adult Career Decision-Making in the Social World*
Ashwini M, CHRIST (Deemed to be University), India
Anuradha S, CHRIST (Deemed to be University), India

While career decision-making is often conceptualised as a discrete event in young adulthood, this paper proposes a framework that views it as an ongoing, iterative process. It posits that young adults develop a dynamic mental model of the world of work, encompassing their understanding of the various educational and career pathways, and perceptions of possibility as shaped by socio-economic status and social context. It also includes their evolving conceptions of career, appropriate developmental timelines (including and beyond career milestones), and subjective definitions of success. The present study engages with Arjun Appadurai's work on the 'capacity to aspire' by exploring how these dynamic mental models are forged as young adults navigate culturally specific 'maps of normativity' to define and pursue what they perceive as achievable life trajectories. The findings are derived from 11 semi-structured interviews with career counsellors across India. Thematic analysis of the data revealed that prevailing discourse surrounding diverse educational and career trajectories contributes to the formation of prototypes regarding specific occupations and the nature of work. Furthermore, career narratives and counter-narratives play a significant role in shaping the perceived value of different fields, thereby influencing young adults' determination of their "real options" and their perceived ability to differentiate between "real jobs" and other forms of work. Given the inherent complexity of the contemporary labour market, young adults frequently employ time-tested truisms as decisional heuristics to insure against the perceived precarity of employment.

17:55-18:20
97412 | *Career Education in Japan: Exploring the Effects of the COVID-19 Era and Student Activities on Fundamental Competencies for Working Persons*
Satoshi Kanamori, Tokyo Kasei Gakuin University, Japan
Motoko Nagao, Takushoku University, Japan
Yoshihiro Maeda, Fukuyama University, Japan

In the field of career education, various countries have established frameworks to define essential skills for employment. For instance, the United States promotes "Workplace Know-how," Australia emphasizes "Generic Skills," and Canada has introduced "Employability Skills 2000+." In Japan, the Ministry of Economy, Trade and Industry defined "Fundamental Competencies for Working Persons" in 2006, which consist of three core abilities—"Action," "Thinking," and "Teamwork"—further subdivided into twelve elements. This study investigates how university life during the COVID-19 pandemic (2020–2024) influenced the development of these competencies among Japanese students. In particular, it examines the relationship between competency levels and students' engagement in various university activities, including part-time work, seminars, and hobbies. Secondary data provided by Nikkei HR, comprising responses from 2,195 third-year university students, were analyzed through descriptive statistics and multiple regression analysis. The results show that students who experienced a longer COVID-19 period tended to score lower on the overall competency scale. However, regression analysis revealed that time spent on hobby activities—especially passive ones such as social media and YouTube—had a stronger negative effect on competency development than the pandemic duration itself. This trend was consistent across all three core abilities: "Action," "Thinking," and "Teamwork." These findings suggest that not only external factors like the pandemic but also individual lifestyle choices during university significantly affect the formation of basic work competencies. From a policy and educational perspective, the study highlights the need to reconsider the role of leisure activities in student development and suggests that career education programs should more carefully address how students allocate their time and engage with extracurricular interests.

18:20-18:45
96165 | *Integrating Theory with Practice in Course Design: Collaborating with Industry Partners for Real-world Challenges and Datasets*
Terrence Chong, University of New South Wales, Australia
Pei-Yu Chien, National Tsing Hua University, Taiwan

Ensuring students' preparedness for employment upon graduation is a critical objective in contemporary higher education. Authentic learning pedagogy effectively bridges theoretical knowledge and practical application, facilitating deeper engagement, enhanced critical thinking, and improved problem-solving capabilities among students. By engaging with realistic tasks and industry-driven projects, students gain practical experience that directly aligns with employer expectations, significantly enhancing their employability outcomes. One effective strategy within this pedagogical framework involves structured collaborations between educators and industry partners, wherein authentic industry problems and real-world datasets are provided for student analysis and solution generation. Students subsequently present their findings back to industry stakeholders, promoting valuable feedback loops and experiential learning opportunities. Nevertheless, implementing such authentic industry-education partnerships poses substantial challenges for educators, including considerable logistical planning, effective coordination, and ongoing communication across all stages—pre-term planning, active teaching, and post-term evaluation. Overcoming these challenges demands deliberate effort, negotiation, and clear expectations among academics and industry representatives. This presentation shares some lessons learned by two educators from two universities in two countries (Australia and Taiwan) in establishing successful authentic learning industry collaborations. Specifically, it reflects on experiences with four industry partners across two postgraduate courses (Marketing Analytics Capstone and Research Methods), encompassing five course offerings between 2022 and 2024. Sharing these lessons aims to support educators in effectively managing partnerships, thus enriching student learning outcomes and fostering sustained, mutually beneficial academic-industry relationships.

Notes

Thursday, November 27

Parallel Sessions

All times are Japan Standard Time (UTC+9)

Abstracts appear as originally submitted by the author. Any spelling, grammatical, or typographical errors are those of the author.

09:00-10:40 | Room 601 (6F)
Thursday Onsite Parallel Session 1
ACE2025 | International Education
Session Chair: Abdul Latiff Ahmad

09:00-09:25
101362 | *The Evolution of Global Learning: A Framework Analysis of Japanese Higher Education Internationalization*
Yuka Jibiki, University of the Sacred Heart, Japan

The internationalization of education is a way to make students become global leaders in this unpredictable, complicated global society. It is also an important factor that makes universities attractive. Study abroad is the traditional internationalization of higher education strategies. In Japan, the internationalization of higher education refers to whether a university has study abroad programs, however, the definition of the internationalization of higher education in Japan has expanded for the past few decades. Internationalization of education also translates to adapting English medium instruction in the curriculum and international student recruitment. The form of study abroad has also diversified from the increased popularity of short term programs to mandatory study abroad programs. While study abroad is a popular way for college students to pursue international experience and to appeal to future employers, it is not the only resource to be exposed to international experience. Students do not have to leave their countries. COVID-19 has played a significant role in becoming accustomed to online study abroad programs in Japan. Implementing cooperative academic programs is another way to offer international education opportunities and ensure the quality of education. This urges international education professionals to listen to students' needs and goals. This presentation will explore the different study abroad models offered in Japanese universities and analyze such various study abroad forms using Knight's (2021) internationalization framework and Sugimoto's (2014) Transnational Education framework with analysis of the Japanese government's internationalization policy. It will explore how such international education programs are relevant to today's global education.

09:25-09:50
100567 | *Strategic Alignments and Local Adaptations: Exploring Doctoral Funding Schemes in the Greater China Region under Shifting Governance Logics*
Qijia Zou, Beihang University, China
Shikui Zhao, Beihang University, China

This study examines the restructuring of doctoral funding schemes in the Greater China region through the dual lenses of the global knowledge economy and East Asian governance traditions. Focusing on Mainland China, Hong Kong, Macau, and Taiwan, it argues that doctoral scholarships function not merely as financial support but as policy instruments where global paradigms of competitiveness intersect with locally embedded logics of statecraft and educational governance. The analysis draws on a corpus of 45 policy texts and regulations on doctoral scholarships, including seven issued by regional governments and thirty-eight by leading universities. In Hong Kong, Macau, and Taiwan, scholarships open to both undergraduate and postgraduate applicants were also included. Methodologically, Latent Dirichlet Allocation (LDA) topic modeling and thematic clustering were applied to identify recurrent rationales, allocation mechanisms, and governance patterns.The findings reveal four distinctive models. In Mainland China, scholarships are embedded in a centralized framework that fuses performance evaluation with ideological and administrative obligations. Hong Kong sustains a meritocratic and internationally oriented scheme that reinforces global excellence while deepening stratification. Macau reflects an institution-led, resource-constrained model with weak integration into global networks. Taiwan demonstrates a decentralized and pluralist arrangement balancing state industrial priorities with diverse academic interests. While the reliance on official documents limits insights into lived practices and longitudinal change, the study offers a macro-political perspective, showing how global neoliberal imperatives are refracted through East Asian governance traditions to produce distinct yet interconnected funding ecologies.

09:50-10:15
97425 | *Academic Equivalency in Nepal's Transnational Degrees: Neo-Sanskritization Theory in Practice*
RajendraRaj Timilsina, Neo-Sanskritization Study Center, Nepal
Archana Sharma, Neo-Sanskritization Study Center, Nepal

Nepal hosts 28 recognized universities and 20 foreign institutions delivering academic programs through private partnerships. These transnational offerings are primarily affiliated with institutions from the United Kingdom, the United States, Switzerland, Thailand, and Malaysia. They follow formats that differ from Nepal's four-year bachelor's and two-year master's structure. The widespread use of the three-plus-one model complicates equivalency and limits graduate mobility within domestic academic and professional spaces. This study employs a qualitative approach combining document analysis and six stakeholder interviews: four college owners, one Tribhuvan University equivalency officer, and one University Grants Commission official. It examines how differences in duration and credit loads, along with fragmented regulatory oversight, contribute to Nepal's equivalency dilemmas. The analysis is framed by Neo-Sanskritization theory, which interprets transnational education as a contextual process of adaptation and legitimacy. Foreign academic structures are not simply adopted but reinterpreted within Nepal's institutional landscape to reflect local values, aspirations, and agency. Comparative higher education theory helps explain these challenges within wider reform efforts in the Global South. Findings show that academic equivalency is influenced more by cultural context and institutional interpretation than by technical criteria. The study recommends reforms that respond to mixed education models, improve regulatory consistency, and recognize Nepal's growing role in shaping transnational academic standards.

09:00-10:40 | Room 601 (6F)

Thursday Onsite Parallel Session 1

ACE2025 | International Education

Session Chair: Abdul Latiff Ahmad

10:15-10:40

98608 | *Incorporating SDGs in Asia Pacific Higher Education Institutions: Perspectives from Institutional Managers and Academics*

Abdul Latiff Ahmad, Universiti Kebangsaan Malaysia, Malaysia
Siew Yean Teo, Universiti Brunei Darussalam, Brunei
Mohd Fais Mansor, Universiti Kebangsaan Malaysia, Malaysia
Kho Suet Nie, Universiti Kebangsaan Malaysia, Malaysia
Chelsey Laird, University Mobility of Asia Pacific, Canada
Ammar Reza Ahmad Riza, Universiti Kebangsaan Malaysia, Malaysia

The University Mobility in Asia Pacific (UMAP) consortium has made significant progress in incorporating the United Nations Sustainable Development Goals (SDGs) across its network. This study focuses on institutional actors that consist of academics teaching SDG related courses and university managers from international relations, strategic planning, and sustainability centers within the UMAP member institutions. Using a qualitative method approach, in-depth interviews were conducted with 13 academics and 10 university managers representing strategic or sustainability roles across its member countries. Academics highlighted some best practices through industry partnerships, designing flexible programs incorporating the digital platform, and the need to enhance collaborative networks within the consortium. Managerial respondents were largely supportive and reported strong institutional reception. However, they emphasized the need for clearer governance structures, more capacity building training for its members, and stronger, actionable strategies to ensure sustainable success. Their insights reveal that while enthusiasm for SDGs is present at institutional leadership levels, translating this into structured action requires formal frameworks, funding and also knowledge support. Findings provide the path for UMAP and similar consortias to strategize on how its members can collaboratively develop impactful SDG initiatives through a structured and strategic action plan.

09:00-10:40 | Room 603 (6F)
Thursday Onsite Parallel Session 1
ACE2025 | Higher Education
Session Chair: William Crawley

09:25-09:50
97174 | *A Case for the Integration of Bilateral Eye Movements from EMDR Therapy into Educational Settings*
Niki Saunders, CamEd Business School, Cambodia

This paper investigates whether bilateral eye movements from EMDR therapy can be effectively applied as a self-regulation and focus tool in educational settings. Bilateral eye movements refer to the swift and repetitive horizontal movement of the eyes from left to right. While many researchers establish the benefits of this eye exercise for stress reduction, improved memory recall, and enhanced focus and attention in lab and therapeutic settings, there has yet to be any study conducted within an educational context. The current paper employs a quantitative research methodology, surveying 110 first-year undergraduate students at a Cambodian university on the subjective ratings of students' anxiety, confidence and ability to focus before and after performing bilateral eye movements prior to an English essay examination. A paired t-test on the results from the survey show that bilateral eye movements lead to a dramatic and statistically significant reduction in pre-test anxiety, and a significant improvement in confidence in exam performance. Although there was no overall significant improvement in students' ability to focus, more than a third of the participants demonstrated an improvement in focus scores. Considering the growing need for tools which assist with Generation Z's – and the upcoming Generation Alpha's - emotional regulation, confidence, and ability to focus, the results of this study make a strong case for the integration of bilateral eye movements into higher education, and highlights the need for further research to test for its efficacy in its primary and secondary-level counterparts.

09:50-10:15
100906 | *Designing Inclusive Hybrid Learning Through Student-Centred Curriculum*
Mei Yee Lee, Monash University Malaysia, Malaysia
Elaine Yin Teng Chew, RMIT University Vietnam, Vietnam
Thanh Thao Luong, RMIT University Vietnam, Vietnam

Despite the COVID-19-driven acceleration of hybrid learning, higher education continues to struggle in fostering active, self-directed learning. A learning journey design framework can help address these challenges by aligning with student needs to enhance their overall experience. This study examines a first-year accounting course that implemented two key student-centred designs: interactive e-learning modules and gamified online quizzes. These tools were integrated into a student journey map to scaffold increasingly self-paced learning. The e-learning modules complemented pre-recorded lectures and positioned students as consultants solving real-world accounting challenges. In this role, students then completed game-like quizzes featuring performance indicators such as knowledge scores, badges, and virtual accounting fees. To evaluate the outcomes of these designs, 122 student reflection essays were analysed using the empathy map framework (Mooradian et al., 2019). Key insights emerged across three dimensions of the empathy map: (1) Think and Feel: students reported motivation, confidence, and enjoyment, with a newfound interest in accounting. (2) See: Students noted that visual elements such as animations and colorful design enhanced learning engagement and accessibility; and (3) Do: students engaged actively with the modules, revised regularly, and requested more quizzes and group discussions. The inclusion of an avatar resembling the lecturer enhanced interactivity and made the experience feel more like a physical class. Although partly gamified, the quizzes were described as fun and motivating. These findings suggest that thoughtful sequencing of traditional and digital materials can create an inclusive, engaging hybrid learning experience that empowers students to take ownership of their learning journey.

10:15-10:40
101158 | *The Impact of a Poverty Simulation Workshop on Undergraduate Students: Implications for Teacher Professional Development*
William Crawley, University of West Florida, United States
Amy Crawley, University of West Florida, United States
Patricia Barrington, University of West Florida, United States
Anika Moore, University of West Florida, United States

Teachers play a critical role in shaping the social and emotional development of their students. Poverty is linked to numerous barriers that can affect a child's academic success, social interactions, and overall well-being. A poverty simulation workshop is an experiential learning tool that will allow participants to walk in the shoes of those experiencing poverty. The purpose of this study is to explore how a poverty simulation workshop impacts the attitudes and knowledge of university students, with an eye to incorporating simulations into teacher training programs. This empirical study employed a mixed-methods approach using pre- and post-workshop survey data to assess participants' perceptions and attitudes towards poverty. A 30-item questionnaire assesses awareness, understanding, and knowledge related to poverty, followed by open-ended questions. The objectives are: assess changes in empathy levels of participants before and after the poverty simulation workshop; identify shifts in attitudes related to community engagement, and understanding of socio-economic disparities; and given a subset of student teacher-education participants, to evaluate the perceived long-term impact on teachers' professional growth and effectiveness in addressing the needs of students from impoverished backgrounds. The presentation will include an overview of the study—to include organization and methodological considerations—presentation of results, and discussion of implications for teacher professional development. This study has the potential to influence professional development trainings by demonstrating the value of an experiential learning workshop in fostering empathy and improving teaching practices. This research may also lead to the integration of poverty awareness training into teacher education programs.

Notes

09:00-10:40 | Room 604 (6F)
Thursday Onsite Parallel Session 1
ACE2025 | Early Childhood Care and Education
Session Chair: Sylvia Chong

09:00-09:25
96331 | *Cross-lagged Associations Between Teacher-Child Relationships and Children's Social Competence in Finnish Kindergarten: Achievement Strategies as a Moderator*
Dini Rahmawati, University of Jyväskylä, Finland
Marja-Kristiina Lerkkanen, University of Jyväskylä, Finland
Sanni Pöysä, University of Jyväskylä, Finland
Eija Pakarinen, University of Jyväskylä, Finland

The relationship between teachers and children in kindergarten is important for children's social competence development and school transition. The aim of the present study is to investigate the bidirectional associations between teacher-child relationships and children's social competence across two time-points in kindergarten, as well as the moderating effect of achievement strategies in this association. Utilizing data from 54 teachers and 566 kindergarten children in Finland, this study used cross-lagged panel analyses to investigate bidirectional associations, and multi-group analysis to investigate moderation effect. The results reveal reciprocal associations of conflict with both prosocial and antisocial behavior, and a predictive association of closeness to prosocial behavior. Moreover, children's passive-avoidance behaviors shows a moderating effect on the predictive association of prosocial behaviors to closeness. The findings reveal that teachers hold important roles in building warm and supportive relationships with children in kindergarten, but children also contribute to this dynamic as teachers react to different behaviors that children display. This study implicates the importance of educational policy and practices to enable teachers to build close relationships with children.

09:25-09:50
97305 | *Empowering Preschool Teachers for Early Dyslexia Detection: Impact of a Health Education Module*
Shalinawati Ramli, Universiti Sains Islam Malaysia, Malaysia
Sharifah Najwa Syed Mohamad, Universiti Sains Islam Malaysia, Malaysia
Shahlan Surat, Universiti Kebangsaan Malaysia, Malaysia
Abdul Rahman Mohamad Gobil, Universiti Teknologi Mara, Malaysia

Preschool teachers play a critical role in the early detection of children at risk of dyslexia, as they interact closely with young learners during their formative years. Beyond teaching, educators must be attentive to early signs of learning difficulties and mental health concerns in the classroom. However, many lack adequate knowledge about specific learning disorders such as dyslexia—knowledge that is essential for timely identification and intervention. The Dyslexia Health Education Module was developed to enhance preschool teachers' understanding of dyslexia and its implications for mental health. The module comprises five units that cover the definition, characteristics, intervention strategies, school-based support, and related mental health issues. Delivered over five weeks, it uses diverse instructional methods including group discussions, video viewing, interactive activities, lectures, and expert-led sessions. A quasi-experimental design was used to evaluate the module's effectiveness. The findings showed significant improvements in teachers' knowledge across five domains: definition, characteristics, treatment, school environment, and impact of dyslexia. MANOVA analysis revealed a statistically significant difference between the intervention and control groups, $F(5, 83) = 28.260$, $p < 0.001$, $\eta^2 = 0.630$, with large effect sizes ranging from $\eta^2 = 0.130$ to 0.564. In conclusion, the Dyslexia Health Education Module effectively improved preschool teachers' knowledge and preparedness to identify and support children with dyslexia. This contributes not only to earlier intervention but also to the enhancement of academic achievement and mental well-being in young learners.

09:50-10:15
101330 | *Family Engagement in Caregiving Activities and Child Development Outcomes in Vietnam: A Fixed-effects Analysis*
Mohamadou Bassirou Jean-Baptiste Sanfo, Universigy of Hyogo, Japan
Keiichi Ogawa, Kobe University, Japan
Thu Ha Truong, Vietnam National University, Vietnam

Family engagement in caregiving activities is vital to early child development. This study examines the extent to which different family members' engagement in caregiving activities —reading books to a child, singing songs to a child, playing with a child, taking a child out, telling stories to a child, and naming, counting, or drawing with a child—is associated with child development and how associations vary by child characteristics and location in Vietnam. It measures child development using the Early Childhood Development Index 2030 items covering 12 subdomains within the broader domains of health, learning, and psychosocial well-being. The analysis employs household fixed-effect regression and data of 2799 children from the Vietnam Multiple Indicator Cluster Survey 2020-2021. Four regression models were estimated for each engagement activity investigated. Findings reveal that all family members' naming or counting with children is positively associated with child development at the 5% level. Moreover, engagement from other adult family members in playing, reading books, taking the child outside, and storytelling shows benefits at the 5% and 1% levels. In contrast, no engagement in naming or counting, reading books, and storytelling is linked to poor child outcomes at the 5% level. Furthermore, we found that associations between caregiving activities and child development may vary by child gender and family wealth, at the 5% level, but not by location (suggesting other contextual factors). Findings highlight that different family members can contribute to child development; therefore, policies need to empower them through accessible resources and training, particularly for low-income households.

09:00-10:40 | Room 604 (6F)

Thursday Onsite Parallel Session 1

ACE2025 | Early Childhood Care and Education

Session Chair: Sylvia Chong

10:15-10:40

96645 | *Navigating Between Care and Curriculum: Role Ambiguity Among Early Childhood Educators*

Sylvia Chong, Singapore University of Social Sciences, Singapore

This presentation explores the tension between caregiving and educating roles in early childhood education (ECE), focusing on how role ambiguity impacts educators' professional identity, job satisfaction, and child development outcomes. Drawing on empirical literature and qualitative insights from early childhood practitioners, the study investigates how competing expectations—nurturing young children and delivering academic outcomes—create internal conflicts and institutional tensions. Qualitative data were collected through 20 semi-structured interviews with three groups of ECE participants: student teachers, teachers, and supervisors. These interviews provided diverse perspectives on how ECE professionals are trained, evaluated and supported. Participants varied in experience, and all interviews were guided by open-ended themes related to: • Professional self-concept • Collaboration with families and communities • Holistic child development • Organizational capacity-building. Four key areas of tension emerged: 1. Role Ambiguity – Educators often grapple with conflicting demands as caregivers and teachers, navigating emotional labor and intellectual expectations with limited clarity or support. 2. Professionalization of ECE – As the field evolves toward greater academic legitimacy, societal perceptions continue to undervalue caregiving, creating identity and recognition challenges. 3. Workplace Culture and Support – A lack of clear institutional guidelines and recognition of ECE's complex responsibilities contributes to stress, burnout, and decreased job satisfaction. 4. Personal and Professional Identity – Educators experience internal tension when their personal values around holistic childcare conflict with performance pressures tied to academic outcomes. The study recommends clarifying role expectations and strengthening policy, training, and workplace practices to support a more integrated and respected ECE professional identity.

09:00-10:40 | Room 605 (6F)
Thursday Onsite Parallel Session 1
ACE2025 | Language Learning and Multilingual Education
Session Chair: Minh Nguyen

09:00-09:25
98562 | *University Students' Perspectives on Generative AI Integration in English Language Learning*
Yong-Jik Lee, Changwon National University, South Korea
Masashi Otani, Nagoya University, Japan

This study investigates the integration of generative artificial intelligence (GenAI) tools, specifically ChatGPT, into English as a Foreign Language (EFL) writing instruction at the university level. The research examines three critical dimensions of student engagement with AI-assisted writing: motivation, cognitive load, and satisfaction. A quantitative survey study was conducted with 57 undergraduate students from a South Korean university, predominantly first-year students from science and engineering fields. The study employed a validated 29-item questionnaire adapted from Woo et al. (2024), measuring student perceptions across the three target constructs. Results indicate generally positive student attitudes toward the integration of GenAI in writing instruction. Motivation scores ranged from 3.40 to 3.79 on a 4-point scale, with students recognizing the value of acquiring GenAI skills while showing moderate levels of self-directed learning initiative. Cognitive load measures (M = 2.95-3.18) revealed moderate levels of mental effort and occasional frustration, particularly regarding instructional clarity and task complexity. Satisfaction scores were consistently high (M = 3.32-3.60), indicating strong student engagement and positive course reception, though concerns emerged regarding knowledge retention. The findings suggest that while GenAI tools demonstrate significant potential for enhancing EFL writing instruction through increased engagement and practical applicability, careful instructional design is essential to optimize learning outcomes. Key recommendations include implementing structured scaffolding to promote self-directed learning, reducing cognitive load through simplified task presentation, and incorporating retention-enhancing strategies. This research contributes to AI-assisted language learning literature by providing empirical evidence of student perceptions, with implications for curriculum designers and EFL educators.

09:25-09:50
95528 | *Fostering Reading Interest: The Influence of Perceptions, Activities, and Promotions*
Brian Aljer Coballes, Ateneo de Manila University, Philippines

Reading is a significant aspect in developing a literate society and is considered as one of the most important skills that an individual can have (Palani, 2012). However, there is a decline in reading engagement over the past years (Breslin & McMenemy, 2006). An important indicator was the result of the Programme for International Student Assessment (PISA), placing the Philippines in the bottom four among the 64 countries in 2022. Factors have been identified to influence self-efficacy and reading interest (Guthrie et al., 1999; Naseri & Zaferanieh, 2012). Reading activities were responsible for promoting reading interest among children (Hulleman et al., 2017). Perceptions on reading were revealed to have a positive impact on reading interest (Bana, 2020). Promotional activities stimulate students' reading interest and creates a more attractive reading environment (Liu, 2024). The study aims to explore the relationship between reading interests and its identified key indicators: reading activities, perceptions of reading, and its promotional strategies. Guided by Self-Efficacy Theory (Bandura, 1977), the study investigated whether reading activities, perceptions, and library promotions significantly predict higher levels of reading interest. Qualitative method of research was employed to analyze the data using multiple regression. The data was drawn from 229 responses of junior high school students that were selected using stratified random sampling. All participants have the same exposure to the reading programs and have the same access to the library resources. The result is significant in strengthening library promotions and reading programs in fostering an environment conducive to reading.

09:50-10:15
101334 | *Reading as Collective Performance: a Classroom Discourse Analysis of Japanese Elementary Literacy Practices*
Patricia Crawford, University of Pittsburgh, United States
Midori Hasegawa, University of Pittsburgh, United States

This study explores the sociocultural influences on teacher questions and classroom discourse in Japanese elementary reading lessons, grounded in Sociocultural Theory. We propose that social contexts, shaped by curriculum and pedagogical approaches, significantly influence classroom reading lessons. Teacher questions act as implicit guides, shaping children's literacy development and learning expectations. Drawing on Vygotsky's sociocultural theory and Street's concepts of literacy events and practices, we view literacy as a social practice molded by cultural interactions. Classroom discourse is analyzed as a "big D" Discourse (Gee, 2015), reflecting embedded social, cultural, and pedagogical values. The study focuses on five second-grade reading lessons in Japan, centered on the story Swimmy, which follow a scripted curriculum, allowing consistent observation of interactional patterns. Discourse analysis examines how teacher questions and responses shape children's participation and learning. Preliminary findings reveal recurring patterns, such as teacher confirmations of student responses, demonstrating how sociocultural expectations are enacted and reinforced. The research highlights reading lessons as collective performances, illuminating how sociocultural contexts shape literacy practices in Japanese primary education. It underscores the distinctive nature of Japanese reading literacy and offers insights for educators on the interplay of pedagogy, curriculum, and sociocultural factors in literacy education. This study contributes to understanding Japanese reading lessons as sites of cultural transmission, providing valuable perspectives for enhancing literacy education globally.

09:00-10:40 | Room 605 (6F)

Thursday Onsite Parallel Session 1

ACE2025 | Language Learning and Multilingual Education

Session Chair: Minh Nguyen

10:15-10:40

97285 | *Teaching English Multilingually Through Art: Contextualising Global Frameworks into Vietnamese Classrooms*

Nguyen Thi Hong Minh, Thai Nguyen University of Education, Vietnam
Anh Nguyen Ngoc, The Vietnam Institute of Educational Sciences, Vietnam
Lavinia Hirsu, University of Glasgow, United Kingdom
Dobrochna Futro, University of Glasgow, United Kingdom

This research explores the localisation of inclusive global English Language Teaching (ELT) frameworks within Vietnam's public school system through the Teaching English Multilingually through Art (TEMA) initiative (April 2024 – December 2025). Grounded in theories of translanguaging (García & Wei, 2014), arts-integrated pedagogy (Eisner, 2002), and community-based teacher development (Burns & Edwards, 2021), the project collaborates with secondary school educators across three provinces, employing monthly Teacher Activity Groups (TAGs) as a as a central approach to professional learning and collaboration. Drawing on stories of change from TAG teacher-facilitators and teachers'portfolios, the presentation highlights teachers' strong support for integrating creative modalities—such as painting, music, storytelling, and digital media—into English instruction to foster student engagement and self-expression. About 600+ teachers and facilitators implemented the arts-based approach in conjunction with a multilingual approach to teaching English, integrating English and Vietnamese to enhance students' confidence and demonstrating translingual practices (Canagarajah, 2013). Despite these limitations, TAGs provide a safe, collaborative environment for teachers to exchange ideas, experiment with new activities, and provide mutual support. Facilitators indicated an increase in teacher confidence, enhanced peer interaction, and a shared appreciation for creativity. Participants suggested additional practical models, exemplar lesson plans, and strategies for modifying activities tailored for lower-proficiency learners. The presentation emphasizes how locally established, teacher-led communities can make global pedagogical frameworks relevant and applicable. It provides research-driven ideas and actual classroom examples to guide policy-makers, curriculum developers, and teacher educators aiming to foster inclusive and innovative English language education at scale.

09:00-10:40 | Room 607 (6F)
Thursday Onsite Parallel Session 1
ACE2025 | Design and Implementation of Educational Policy
Session Chair: Ayobami Precious Adekola

09:00-09:25
96339 | *Beyond Coding: Reframing Vocational Education Through South Korea's ICT Education Policy and the Varieties of Capitalism Framework*
Seri Yoon, Waseda University, Japan

In 2018, South Korea implemented mandatory coding education in primary and lower secondary schools as part of a national education reform. While this policy is often celebrated as a forward-thinking strategy aligned with SDG 4.4, which aims to increase access to technical and vocational skills, it also reflects the country's unique industrial and economic structure, heavily shaped by export-driven conglomerates and a coordinated market economy model. Using a qualitative method, this study draws on policy documents, national curriculum guidelines, government reports, and economic development strategies to examine how South Korea's coding education policy reflects the structural characteristics of its coordinated market economy. Through document analysis interpreted within the Varieties of Capitalism framework, the research explores the institutional logic behind vocational education policy formation and its implications for the realization of SDG 4.4. By adopting Varieties of Capitalism (VoC) as a framework for analyzing education policy, this study contributes to a more structurally grounded understanding of skills development, strengthening the case for aligning educational reforms with broader socio-economic systems. It further contributes to global education discourse by questioning the uncritical adoption of high-tech vocational models and encouraging more context-specific strategies that reflect each state's economic and institutional configurations toward achieving the shared goal of SDG 4.4.

09:25-09:50
96670 | *Nonprofits and Innovation in Education Using Technology*
Goutham Kumar, Team4Tech, United States

There is an urgency to address the digital equity gap in education. By 2030, 90% of jobs worldwide will have a digital component. However, forecasts show that nearly 1 billion youth will not have the digital skills to participate in the global workforce (https://www.weforum.org/agenda/2020/01/future-of-work/). But technology access alone is not enough to shift this reality. Research shows that technology-assisted learning delivered with teacher training programs has the largest positive effects on learning outcomes (https://edpolicy.stanford.edu/sites/default/files/scope-pub-using-technology-report.pdf). Investing in both is a powerful equalizer in ending extreme inequality and promoting access to opportunity. Through the presentation, I will be taking the audience through multiple case studies of using technology and innovation to further the learning cause through Team4Tech's model that focuses on co-designing solutions with the 30% of the world's educators who are employed by nongovernmental organizations (NGOs). These community-based organizations are typically reaching the most marginalized learners, yet they often lack access to education and technology resources. One such project involved 10 technically bright and professionally accomplished volunteers from Guidewire Software Solutions supporting Ek Tara in Kolkata, India, that caters to girls and women from an underserved community by providing them quality and holistic education in addition to livelihood options to the women. By leveraging skilled volunteers, Team4Tech was able to build two core structures that would enable Ek Tara to instill data and quality into their vision.

09:50-10:15
96648 | *Bridging Technology and Literature: Integrating Digital Arts in Urban and Rural Classrooms*
Siang Yu Chen, National Changhua University of Education, Taiwan

This study explores how digital technology and literature-based arts education can enhance primary students' creativity and expression in Taiwan. Focusing on the Ministry of Culture's "Arts into Schools" initiative, it examines five case schools—three in urban New Taipei City (Banqiao, Zhongshan, Daguan) and two in rural Taitung County (Taoyuan, Fengli). Using qualitative methods including classroom observations, student work analysis, and interviews with participating artists Jason Chiu and Vincent Monceaux, this research highlights how digital aesthetics—ranging from AI-generated images to multimedia installations—foster cross-disciplinary learning and narrative expression. Findings reveal that integrating digital tools with children's literature enables students to visualize texts, collaborate with AI, and develop new storytelling forms. While urban schools benefit from access to abundant technology, rural students often display remarkable creativity using limited resources. The study also uncovers diverse student attitudes toward AI, with some valuing its efficiency and others emphasizing the emotional depth of human creation. This research demonstrates the potential of arts-based digital pedagogy to promote creative literacy and educational equity across socio-geographic contexts.

10:15-10:40
98530 | *Integrating Artificial Intelligence into School-based Sexuality Education in South Africa: Barriers, Enablers, and Pathways for Innovation*
Ayobami Precious Adekola, University of South Africa, South Africa

Artificial Intelligence (AI) has great potential to transform school-based sexuality education in South Africa by enabling personalised content, improving engagement, and addressing diverse socio-cultural needs. However, the feasibility of AI integration remains uncertain due to limited consolidated evidence, exacerbated by the digital divide, unequal technology access, and varying cultural contexts, particularly in rural communities. This systematic review identified the barriers, enablers, and innovative pathways for incorporating AI into sexuality education in South Africa. Following PRISMA guidelines, peer-reviewed and grey literature published from 2020–2024 were searched in Scopus, PubMed, Web of Science, and Sabinet using terms such as "Artificial Intelligence," "sexuality education," and "South Africa." Included studies focused on AI-based tools, platforms, or pedagogies relevant to the South African context. Data were thematically analysed and interpreted through the Technology Acceptance Model to assess perceptions of AI's usefulness, ease of use, and contextual influences. Thirteen studies met the inclusion criteria. Barriers included inadequate rural digital infrastructure, limited AI teacher training, ethical concerns, and socio-cultural resistance. Enablers were policy support, youth digital literacy, and multi-sector partnerships. Innovation pathways involved co-designing AI tools, adaptive chatbots, hybrid learning, AI platforms, Virtual Reality simulations, intelligent tutoring, and AI literacy in teacher development. AI can transform school-based sexuality education in South Africa if integrated contextually, ethically, and equitably. Future policies and interventions should address barriers and leverage enablers for sustainable and inclusive interventions. Recommendations were made for future research that should focus on participatory AI design, policy alignment, and impact evaluation.

Notes

09:00-10:40 | Room 608 (6F)
Thursday Onsite Parallel Session 1
ACE2025 | Education Research and Development in Higher Education
Session Chair: Askat Tleuov

09:00-09:25
97268 | *Bridging Worlds: A Global South–North Collaboration in Teacher Education for Intercultural Change*
Anniek Orye, PXL University of Applied Sciences and Arts, Belgium
Lieve Cuypers, PXL University of Applied Sciences and Arts, Belgium
Sofie Molemans, PXL University of Applied Sciences and Arts, Belgium

In this international research project, PXL University of Applied Sciences and Arts collaborated with four Global South partners: UTN Ecuador, RUPP Cambodia, NWU South Africa, and JU Ethiopia. Our goal was to enhance the intercultural competencies (IC) of teacher trainers by focusing on 'cultural identity' to innovate didactical and pedagogical approaches and promote Educational Inclusion (SDG 4 and SDG 10). During the first year, we co-created a theoretical framework and shared relevant topics of focus to foster critical thinking, cultural identity, and intercultural understanding, culminating in an International Training Programme (ITP) in Belgium. This gathering established an international learning community that bridged the Global North and South, creating a space for reflection, debate and exploring shared professional and intercultural values. The project used a decolonization approach to create a safe space for dialogue, challenging Eurocentric paradigms and their associated blind spots, while encouraging a paradigm shift towards diverse perspectives. Teacher education is central to achieving sustainable, generational change and educate future teachers as 'Change Agents'. In the second year, an e-course for teacher educators was developed to promote a culturally sensitive mindset. A concept list and competency framework were created to ensure alignment and support culturally responsive teaching. This presentation aims to take you on a journey through the two inspiring years of this project, with the hope of sparking inspiration and encouraging you to challenge your own mindset.

09:25-09:50
96546 | *Grit Matters: Exploring the Mediated Pathway to Mental Health Through Perceived Social Support in Early-Career Lecturers*
Iriani Indri Hapsari, Universitas Negeri Jakarta, Indonesia
Irma Rosalinda, Universitas Negeri Jakarta, Indonesia
Anggi Mayangsari, Universitas Negeri Jakarta, Indonesia
Devie Yundianto, Universitas Nadhlatul Ulama Indonesia, Indonesia

Early-career lecturers in higher education often face a unique set of challenges that can impact their professional development, mental health, and overall job satisfaction. many problems issues are workload overload and role ambiguity, job insecurity, pressure to publish, lack of structured mentoring, work-life balance, institutional politics and cultural dynamics and relates with their mental health condition, they need grit and support to struggle. This study aims to examine the relationships between grit, perceived social support, and mental health among lecture in early career lecturers. Participants in this research total 170 young lecture in higher education. Using a quantitative approach, data were analyzed with Pearson correlation and mediation analysis via PROCESS in SPSS. Results show that grit is significantly positively correlated with perceived social support ($r = 0.233$, $p < 0.01$) and mental health ($r = 0.445$, $p < 0.01$). Perceived Social support also positively correlates with mental health ($r = 0.419$, $p < 0.01$). Path analysis revealed that grit has a direct positive effect on mental health ($\beta = 0.74$, $p < 0.001$) and Perceived social support ($\beta = 0.52$, $p = 0.0023$), while perceived social support positively affects mental health ($\beta = 0.30$, $p < 0.001$). Moreover, perceived social support partially mediates the effect of grit on mental health, with a significant indirect effect ($\beta = 0.16$, 95% CI [0.04, 0.31]). These findings underscore the importance of fostering grit and perceived social support to enhance mental health outcomes.

09:50-10:15
97489 | *The Filipino Social-Emotional Learning Scale (FSEL): A Multidimensional Measurement Model*
Antonio Caesar Valencia, Ateneo de Naga University, Philippines
Leonor Lynette Mendoza, Ateneo de Naga University, Philippines

The Filipino Social-Emotional Learning (FSEL) Scale was developed to assess social-emotional competencies in Filipino students aged 12 to 24, grounded in the CASEL framework. The research aimed to create a culturally relevant tool to address the unique social and emotional dynamics within the Filipino context. A 100-item questionnaire was administered to 376 students from various regions in the Philippines. Exploratory factor analysis was conducted first on a randomly split subsample, then confirmatory factor analysis that reduced the scale to 67 items across six factors: Pakikipagkapwa (shared inner self and shared identity), Kamalayan sa Sarili (Self-Awareness)), Kasipagan (Diligence), Pagkamakatao (How they relate to being a good human being), Pagmamalasakit (Compassion), and Pakikiramdam (Sensitivity). The sampling adequacy measure (KMO=0.945) and Bartlett's test of sphericity ($x^2 = 5322.1$, df =2346, $p<0.001$) confirmed the appropriateness for extraction, with these six factors explaining 76.41% of the variance. The scale demonstrated excellent internal consistency, with an overall Cronbach's alpha of 0.995. Reliability for each factor was also high: Pakikipagkapwa ($\alpha = 0.987$), Kamalayan ($\alpha = 0.984$), Kasipagan ($\alpha = 0.975$), Pagkamakatao ($\alpha = 0.961$), Pagmalasakit ($\alpha = 0.916$), and Pakikiramdam ($\alpha = 0.958$). Fit indices indicated acceptable model fit (CFI=0.915; TLI= 0.904, though RMSEA = 0.086 suggested room for improvement. The scale offers a valid and reliable tool for assessing SEL within the Filipino context. Thus, the FSEL psychometric properties affirm its potential as an effective instrument for assessing FSEL in educational settings.

09:00-10:40 | Room 608 (6F)

Thursday Onsite Parallel Session 1

ACE2025 | Education Research and Development in Higher Education

Session Chair: Askat Tleuov

10:15-10:40

100641 | *Faculty Mediation in Transnational Higher Education: Curriculum Localization and Professional Identity Negotiations in Kazakhstan's International Partnerships*

Askat Tleuov, KIMEP University, Kazakhstan

Global higher education increasingly operates across borders, yet the human dimension of this transformation remains underexplored. While transnational education partnerships proliferate worldwide, the faculty who deliver these programs navigate complex tensions between maintaining international standards and serving local contexts. This qualitative comparative case study examines how faculty operational experiences intersect with curriculum localization processes in Kazakhstan's transnational higher education (TNE) initiatives. Drawing from semi-structured interviews with 28 participants across two regional universities implementing dual-degree programs with established Western institutions, the research explores faculty agency within constrained institutional environments and the complex dynamics of curriculum adaptation in post-Soviet educational contexts. The study reveals ten interconnected themes that challenge existing TNE scholarship. Faculty experience "linguistic colonization anxiety" as English-medium instruction requirements create professional identity fragmentation, while simultaneously engaging in "silent adaptation" practices that unofficially contextualize foreign curricula for regional industry needs. Participants describe systematic marginalization from curriculum design decisions despite possessing superior local knowledge, yet exercise considerable agency through protective pedagogical modifications. Generational divides emerge between Soviet-trained educators struggling with Western pedagogical philosophies and younger faculty embracing international approaches. Findings demonstrate that curriculum localization occurs primarily through faculty mediation rather than institutional planning, with educators serving as cultural bridges while managing professional vulnerability. These insights contribute to TNE theory by revealing the post-Soviet educational transition context as uniquely complex, where faculty simultaneously resist and embrace internationalization. The study provides evidence for developing integrated theoretical frameworks that recognize faculty experiences and curriculum adaptation as interconnected phenomena, offering practical implications for TNE quality assurance.

09:00-10:40 | Room 702 (7F)
Thursday Onsite Parallel Session 1
ACE2025 | Adolescent and Adult Education
Session Chair: Pamela Mikaresti

09:00-09:25
101277 | *Developing a Contemporary Curating Learning Approach for Adolescents: A Perspective of Sensemaking Theory*
Hsiu Han Chuang, National Cheng Kung University, Taiwan
Chia Han Yang, National Cheng Kung University, Taiwan

In Taiwan's outcome-oriented educational culture, art education often emphasizes product completion, while lacking deeper understanding of knowledge and personal interpretation. Although the 2019 Curriculum Guidelines highlight "aesthetic experience" and "perspective expression," students' works often remain superficial. Existing studies on sensemaking in education suggest that meaning can be fostered through dialogue and reflection, but they rarely explore how learning outcomes can be made visible in concrete forms, nor how third-party perspectives beyond student self-reflection can be incorporated. This study therefore aims to: (1) understand the challenges faced in Taiwanese secondary art education; (2) develop a curatorial pedagogy grounded in sensemaking theory to link knowledge learning with personal experience; and (3) examine its effectiveness through multi-perspective evaluation, including students, experts, and audiences. A mixed-methods design was adopted in three stages: (1) semi-structured interviews with experts in teaching and curating to identify challenges and perspectives on sensemaking; (2) participatory observation of a curatorial camp to analyze course processes; and (3) implementation of a curatorial teaching program with students aged 13–15, who curated their own exhibition. Data were collected from student curators, audiences, and experts to assess teaching effectiveness. Findings demonstrate that students were able to reinterpret knowledge by connecting it with life experiences, thereby transforming their works into carriers of personal expression and sensemaking rather than mere products. This process deepened students' learning perceptions and offered more authentic and meaningful presentations in practice-based courses.

09:25-09:50
96625 | *Enhancing Andragogy for Educators Through the Knowledge Building Professional Learning Approach [KBPL]*
Joo Seng Melvin Chan, Ministry of Education, Singapore
Chew Lee Teo, National Institute of Education, Singapore
Anthony Chua, Ministry of Education, Singapore
Kennedy Loo, National Institute of Education, Singapore

Knowledge Building (KB) has emerged as a transformative pedagogical approach in Singapore's secondary education. What is less studied is the adaptive use of KB for professional learning setting. This practice-orientated study explores the design and implementation of Knowledge Building Professional Learning Approach (KBPL) in a Singapore Secondary School. KBPL is a principle-based, idea-centric and practitioner-driven andragogical approach that integrates KB principles and practices, supported by Knowles' adult learning theory, Tuckman's group development model and 4Ms collaborative scaling framework [Micro, Meso, Macro and Mega]. A key feature of KBPL lies in its signature andragogical moves—Let's Hear out. Let's Build-on. Let's Rise above—that helps in creating a rigorous, relevant and reflective dialoguing professional learning culture. The goal is towards collective knowledge creation that focuses on elevating educators' classroom instructional practices. Some activities include (i)Intra-School Idea Café that promotes cross-pollination of pedagogical practices of subject disciplines,(ii)Inter-School project that connects educators from 2 or more schools in reframing students' learning experience for subjects like "The History Times" and (iii)International KB Community Network that fosters symmetrical knowledge advancement as a springboard towards pedagogical scalability and adaptability in meeting the needs of diverse educational context. The overwhelmingly positive quantitative and qualitative feedback from participants, ranging from how KBPL helps in making PL sessions more accessible, meaningful and productive, to how it facilitates pedagogical growth in both depth and breath, underscores KBPL's strong efficacy in fostering effective professional learning and collaborative culture for educators where adult learners' sense of autonomy, agency and maturity are maximized and realized.

09:50-10:15
101040 | *Creation of the "Ya'ka Aik" Dance: A Digital Pedagogical Innovation for the Preservation of Enggano Culture in Distance Learning*
Pamela Mikaresti, Terbuka University, Indonesia
Agus Tatang Sopandi, Terbuka University, Indonesia
Herlinda Mansyur, Padang State University, Indonesia
Elizar Koto, Insititut Seni Indonesia padangpanjang, Indonesia
Rina Damayanti, Terbuka University, Indonesia
Zahwa Putri, Terbuka University, indonesia

In mid-2025, a national issue concerning the geographical isolation of Enggano Island, Bengkulu Province, Indonesia, presents a critical challenge in preserving its cultural heritage while raising pedagogical concerns about teaching traditional arts within the distance higher education system. This study aims to develop a new choreographed dance, "Ya'Ka Aik," derived from the Enggano War Dance, and to establish it as an innovative digital-based dance learning model for students at Universitas Terbuka, specifically within the Primary School Teacher Education Program. The research methodology employs Alma Hawskin's theory of dance creation through the stages of exploration, improvisation, and composition, informed by a literature review and in-depth interviews exploring the historical and philosophical values of the War Dance. The primary outcome of this study is a pedagogical product in the form of the "Ya'Ka Aik" choreographed dance, integrated into interactive digital learning media for students at Universitas Terbuka. This media has proven effective for students, particularly those training to become future educators, in transforming complex traditional dance into systematic teaching material that can be accessed independently, thus bridging the gap between intangible cultural heritage and the educational demands of the digital era. This research significantly contributes to the study of the Ya'Ka Aik dance through the application of art practices as intangible cultural heritage within the distance education curriculum while simultaneously reinforcing national identity through educational innovation.

09:00-10:40 | Room 702 (7F)

Thursday Onsite Parallel Session 1

ACE2025 | Adolescent and Adult Education

Session Chair: Pamela Mikaresti

10:15-10:40

95684 | *Experiential Learning in Post-retirement Engagements: An Exploratory Study in Sri Lanka*

Kumudinei Dissanayake, University of Colombo, Sri Lanka

Experiential learning is the process of active learning by doing. According to David Kolb, this process includes stages of experiencing (active engagement), reflecting (reflective self-observation), thinking (conceptualization), and acting (real experimentation). Experiential learning has been widely discussed, experimented, applied and researched in the context of student learning. With population and workforce ageing, many people being opted to post-retirement work engagements, learning by doing has become a way of remaining employable. However, retirees' readiness for experiential learning in post-retirement engagements has been doubted in the existing literature. Present study explores experiential learning experiences of retirees through a qualitative inquiry. Twenty-six participants, aged above 57 were purposively selected for the study from those engaged in formal or informal paid work in the metropolitan city area of Sri Lanka. Kolb's Experiential Learning Theory (learning process) and Lave and Wenger's Situated Learning Theory (learning context) are served as the theoretical base of this exploration. Findings exhibit that many retirees have opted to 'learning (new skills) by doing' as a necessity for post-retirement engagement. New opportunities opened for post-retirement work, advancing technology, generative work pressure, new modes of working, and changing nature of work roles have compelled retirees to acquire new hands-on-experience in the post-retirement work engagements. These findings suggest that the capacity for experiential learning extends beyond the typical workforce, indicating that organizations can assign roles to retirees that incorporate facilitated learning opportunities.

09:00-10:40 | Room 703 (7F)
Thursday Onsite Parallel Session 1
ACE2025 | Learning Experiences, Student Learning and Learner Diversity
Session Chair: Munia Hweidi

09:00-09:25
101319 | *'Clumsy' Methodology for Wicked Interdisciplinary Education: A Predictive Tool to Uncover Blindspots from Students' Conflicting Learning Preferences*
Zheng Renjie, Singapore Institute of Technology, Singapore
Agnes Xue, Singapore Institute of Technology, Singapore
Rachel Ang, Singapore Institute of Technology, Singapore

Educators can appreciate that a 'wicked' problem we face is the challenge of catering to diverse student learning preferences. In our university-wide interdisciplinary design innovation module, we uncovered a deeper wicked problem: conflicting learning preferences amongst students - leading to blind spots where module policies are misaligned with the learning preferences of some students. As such, we ask, how might we deploy or adapt existing frameworks or methodologies to help us pre-emptively uncover blind spots caused by conflicting students' learning preferences, so that we can minimize gaps in learning outcomes? This study first investigated a data set of module feedback (from a cohort of three thousand year-one students) through the analytical lenses of Mary Douglas's Grid-Group Typology. The results showed a framework that can shed light on the nature of conflicting preferences and how 'elegant' (non-pluralistic) module policy blind spots lead to gaps in learning outcomes. This study then investigated how this framework can be adapted to become a predictive tool to help educators uncover potential blind spots in their modules. The results showed a methodology that educators can deploy to uncover blind spots in both 1) existing modules (through guided investigation of existing data), and 2) new modules (through guided reflection), so that they can implement 'clumsy' (non-elegant) policies to address conflicting student learning preferences before the next/new module starts. This paper concludes with an open invitation to collaborate on studies to test this 'Clumsy' Methodology in other educational contexts.

09:25-09:50
96890 | *Not Just Setting Goals: The Relationship Between Goal-Setting Practices, Calibration Accuracy and Student Performance*
Maxim Boitcov, HSE University, Russia
Kseniia Adamovich, HSE University, Russia

The present study explores the relationship between goal-setting accuracy, prior student behavior, and academic achievement in the context of an online preparatory course. While goal-setting is widely recognized as a tool for enhancing academic success, existing research often overlooks metacognitive differences among learners — particularly their ability to set accurate and realistic goals. Drawing on Goal-Setting Theory and Calibration Theory, this study investigates how the precision of students' goals (defined as the gap between their anticipated and actual test scores) relates to test performance. It also examines how students' prior behaviors — such as earlier test results, previous goal-setting attempts, and course engagement — predict the accuracy of future goal-setting. The panel dataset includes five waves of observations from 426 high school students preparing for a standardized literature exam. Random-effects regression models demonstrate that setting a grade goal significantly improves test performance. However, students who overestimated their future performance scored significantly lower than those who set accurate goals, while underestimating was associated with higher scores. Additionally, prior high test performance increased the likelihood of overestimation, while active course engagement reduced it. No significant predictors were found for underestimation. These findings highlight the critical role of goal-setting accuracy in academic success and underscore the need for educational interventions that foster metacognitive awareness and realistic self-assessment. The study contributes to a more nuanced understanding of how goal-setting functions in online education and informs the design of personalized learning strategies.

09:50-10:15
101298 | *Exploring Conflict Resolution Types Among Korean Middle School Students Using Latent Profile Analysis and Identifying Predictors*
Ukil Kim, Seoul National University, South Korea
Youngin Lee, Seoul National University, South Korea
Hyun-Jeong Park, Seoul National University, South Korea
Hyery Cho, Seoul National University, South Korea
Suyeon Cha, Seoul National University, South Korea
Sujin Baeg, Seoul National University, South Korea

This study aimed to identify conflict resolution types among Korean middle school students using latent profile analysis (LPA) and to examine predictors of each type. Cooperative learning is more active in middle school than in elementary or high school, and students often face conflicts in their peer interactions that require resolution. Developing conflict resolution competencies is therefore a critical task for middle school students. The analysis used data from 4,653 first-year middle school respondents from the Seoul Education Longitudinal Study (SELS) 2020. LPA was conducted to identify conflict resolution types, and logistic regression analysis examined predictors of these types. The main findings were as follows. Three latent profiles were identified: Relationship-Oriented Accommodating Type (3.65%), Passive Cooperative Type (32.44%), and Collaborative Cooperative Type (63.92%). With the Passive Cooperative Type as the reference group, students with higher academic achievement, stronger relationality, better cooperative skills, and superior emotional regulation were more likely to belong to the Collaborative Cooperative Type, and less likely to belong to the Relationship-Oriented Accommodating Type. This study is significant in that it empirically classified middle school students' conflict resolution into three types, confirming that most students belong to groups with high conflict resolution competence, while a vulnerable group exists. It also highlights the importance of integrating social-emotional learning (SEL) into school curricula.

09:00-10:40 | Room 703 (7F)

Thursday Onsite Parallel Session 1

ACE2025 | Learning Experiences, Student Learning and Learner Diversity

Session Chair: Munia Hweidi

10:15-10:40

101351 | *Facilitating Dialogue in a Diverse Classroom*

Munia Hweidi, Sophia University, Japan

This presentation reflects on the experience of teaching a multicultural comparative literature course to a cohort of multicultural students with vastly different world views and experiences. The class structure facilitates dialogue within the classroom and allows all students to participate in both small and large classes. Class time is divided into three slots. 1) Introduction of concepts, context, and expectations. 2) Group discussions: students are divided into groups with individual tasks. Group lead facilitates conversations, and notetaker writes down notes. 3) Class discussions: the group lead shares with the class a summary of their discussion and then we discuss as a class. The notetaker submits the notes to a prepared form that the teacher later reviews. Feedback from students has shown positive reception. Students have expressed that they are able to have diverse conversations with people they might not usually interact with, they are exposed to a variety of points of views and personalities, and are able to hear how different groups approach similar themes and might have vastly different perceptions. The class feedback and teacher comments in the third part of class allows them to clarify any points they may not fully grasp, ask questions, and find connections that they previously might not have perceived. The three sections allow them to interact with the class in different ways, creating a more dynamic learning environment which leads to better focus, more diverse dialogue, and less mental fatigue.

09:00-10:40 | Room 704 (7F)
Thursday Onsite Parallel Session 1
ACE2025 | Technical-Vocational and Entrepreneurship Education
Session Chair: Phyllis King

09:00-09:25
No presentation

09:25-09:50
97444 | *A Study on the Learning Motivation and Learning Outcomes of Short-form Videos into the Design Cluster of Vocational High School*
Shin Liao, National Taiwan Normal University, Taiwan
Chun-Wei Chen, National Taiwan Normal University, Taiwan
Yi-Hsuan Wang, National Taiwan Normal University, Taiwan

The purpose of this study was to investigate the integration of short-form videos into practice-oriented courses in the design cluster of a vocational high school and to analyze their relationship with students' learning motivation and learning outcomes. This study adopted an experimental research design, and the participants were 41 students from the design cluster of a vocational high school in Taiwan. The study produced short-form instructional videos for the professional subject Principles of Form, with the thematic unit of Art and Craft Movement, which included three components: "historical background", "design concepts", and "representative figures". The videos were integrated into classroom instruction and implemented prior to the evaluation of learning outcomes, with a questionnaire based on the ARCS motivation model administered to measure students' learning motivation. Data were analyzed using descriptive statistics, paired-sample t-tests, one-way ANOVA, and Pearson correlation analysis. The results indicated that students demonstrated a certain level of learning motivation toward the integration of short-form videos into the course, and their learning outcomes also showed improvement; however, no significant correlation was found between learning motivation and learning outcomes.

09:50-10:15
98593 | *Bridging Big Data Analytics and Entrepreneurial Learning: Enhancing Digital Marketing Strategies and Competitiveness of Fashion MSMEs Through Informal Digital Education*
Chandra Kuswoyo, Universitas Kristen Maranatha, Indonesia
Hendra Bunyamin, Universitas Kristen Maranatha, Indonesia
Henky Lisan Suwarno, Universitas Kristen Maranatha, Indonesia

In the post-pandemic era, entrepreneurial education and digital capacity building have become essential for empowering micro, small, and medium-sized enterprises (MSMEs) in emerging economies. This study investigates how the adoption of big data analytics and digital marketing strategies can drive business competitiveness within fashion-based MSMEs in Indonesia, while highlighting the pivotal role of digital readiness as a moderating factor. Although much has been discussed about digital transformation in business, limited attention has been given to the intersection between entrepreneurial learning and technology adoption in the MSME context, especially in non-formal learning environments. The study employs a mixed-method sequential explanatory design, involving 210 MSMEs across three Indonesian cities: Bandung, Yogyakarta, and Surabaya supported by in-depth interviews with selected business owners. Findings are expected to contribute to both entrepreneurship education and policy by demonstrating how data-driven approaches enhance digital competencies, decision-making skills, and long-term business adaptability. This research aligns with the conference's emphasis on innovation in education, by offering a transferable framework for informal digital learning among entrepreneurs. It also calls for a reconceptualization of digital literacy not only as a personal skill but as an organizational capacity, particularly relevant in vocational, community-based, and informal educational contexts. The implications for educators, policy-makers, and digital learning facilitators are significant, as this work bridges the gap between technology adoption and entrepreneurial pedagogy in Asia's dynamic economic landscape.

10:15-10:40
96693 | *Empowering Innovation Through Applied AI: A Technical College Model for Creativity-Driven Workforce Transformation*
Phyllis King, Waukesha County Technical College, United States

At Waukesha County Technical College (WCTC), innovation and creativity are infused across an expanding ecosystem of AI-focused academic and workforce initiatives. As the role of artificial intelligence accelerates across sectors, WCTC has positioned itself as a national leader in delivering accessible, high-impact AI education rooted in hands-on application and industry relevance. This presentation will explore how WCTC leverages its AI assets—including pioneering associate and stackable certificate programs, an Applied AI Lab, and an accelerator firm known as gener8tor, to nurture innovation among students, entrepreneurs, and working professionals. The college's stackable credential model enables learners to enter and exit at multiple points, allowing for rapid skill acquisition and career mobility. Customized corporate training and tailored curricula co-developed with industry ensure alignment with workforce needs, while entrepreneurship support and startup incubation foster real-world creativity. A forthcoming Advanced Technical Certificate in AI aims to develop professionals with deep, project-based experiences in ethical AI, generative tools, and deployment practices. Through cross-sector collaboration and an emphasis on applied problem-solving, WCTC has created a scalable model that fosters both individual innovation and economic growth. Attendees will gain insights into building institutional frameworks that galvanize AI learning and inspire the next generation workforce. This session will be particularly relevant to institutions seeking to integrate emerging technologies with inclusive, innovation-centered education strategies.

Notes

09:00-10:40 | Room 705 (7F)
Thursday Onsite Parallel Session 1
ACE2025 | Foreign Language Education and Applied Linguistics
Session Chair: Phuong Nguyen

09:00-09:25
95380 | *The Mediating Role of Self-efficacy in the Application of ELF-aware Practices in EFL Contexts*
Athina Malea, Aristotle University of Thessaloniki, Greece
Areti-Maria Sougari, Aristotle University of Thessaloniki, Greece

The increasing prevalence of English as a lingua franca (ELF), facilitating communication among speakers of diverse linguistic backgrounds, has necessitated a pedagogical transition from conventional instruction to ELF-informed methodologies. Teachers' self-efficacy beliefs are conceived as a crucial determinant in the successful integration of these evolving practices within the classroom. This paper aims to investigate whether the three teachers' self-efficacy dimensions, i.e. classroom management, student engagement and instructional strategies, have a positive impact on teachers' willingness to implement ELF-aware practices in their EFL classrooms. A mixed-methods approach was employed combining three different instruments: an online survey, semi-structured interviews, and in-class observations. A total of 951 Greek teachers of English responded to the questionnaire and 14 teachers were involved in class observations and semi structured interviews. Findings revealed a statistically significant positive correlation between teacher self-efficacy and the adoption of ELF-aware teaching practices. However, the analysis indicated that each self-efficacy dimension exerted varying degrees of influence on ELF implementation. This necessitates targeted professional development interventions to enhance specific aspects of teacher self-efficacy that will lead to more effective and successful integration of ELF-aware practices within EFL classrooms and better learning outcomes.

09:25-09:50
96349 | *Exploring Saudi College EFL Female Learners' Metamotivation and Regulation Strategies: A Qualitative Study*
Hajar Al Sultan, King Faisal University, Saudi Arabia

As motivation is increasingly viewed as a complex construct, shaped by situational, social, and cultural factors, limited qualitative research has explored how Saudi college EFL female learners perceive and regulate their motivation. Addressing this gap, the study uses a metamotivational framework and qualitative design to examine learners' reported strategies, preference for promotion or prevention orientations, and how their awareness reflects their metamotivational knowledge. Based on 115 self-reported responses, thematic analysis revealed that learners' responses were dominated by promotion-oriented strategies —focused on aspirations, achievement, and growth— while demonstrating limited awareness or use of prevention-focused regulation. While learners demonstrated a multidimensional understanding of motivation and an integrated, adaptive approach to regulation—reflecting motivational flexibility—their strategies were largely grounded in prior experience. Although the findings reflect perceived rather than observed behavior, learners reported using integrated strategies—such as interest regulation, goal orientation, value alignment, and self-reflection—to regulate their motivation in response to internal beliefs, emotional fluctuations, and external influences. These findings highlight a promotion-prevention imbalance and underscore the need to develop learners' awareness of motivational quality. This study contributes to current metamotivation research among female learners in non-Western contexts and supports instructional practices that emphasize personal growth, autonomy, and guided reflection to help bridge the gap between learners' experiences and their metamotivational knowledge in Saudi EFL education.

09:50-10:15
101075 | *Gender-Difference in Gameplay Interest, English Achievement in a Guessing Goods Game*
Jon-Chao Hong, National Taiwan Normal University, Taiwan
Ming-Yue Lin, National Taiwan Normal University, Taiwan
Chi-Chin Wong, National Taiwan Normal University, Taiwan
Zhao-Rong Huang, National Taiwan Normal University, Taiwan

Improving English proficiency is a strategic priority for many EFL countries because it expands students' intercultural communication skills and strengthens their competitiveness. Although digital—especially game-based—elements are increasingly woven into lessons to boost motivation and efficiency, little is known about whether their motivational pull differs by gender. This study, therefore, examined whether high-school students' interest in digital games predicts English achievement and whether gender moderates that link. Eighty-four Taiwanese students (47 males, 37 females) completed a validated game-interest questionnaire and an English achievement test after a gamified unit featuring points and timed challenges. Differential analyses showed that game interest was a significant positive predictor of achievement, and that the effect was stronger for males than for females. The results suggest that gamification can enhance language learning for all students, but male learners may derive greater performance benefits; teachers should therefore diversify game mechanics and provide targeted supports to ensure female students gain comparable advantages.

10:15-10:40
97286 | *Implementing Universal Design for Learning (UDL) with Open Educational Resources (OER) to Foster Inclusive English Language Learning*
Phuong Nguyen, Ho Chi Minh City University of Education, Vietnam

The Universal Design for Learning (UDL) framework, introduced in the 1990s, has significantly advanced inclusive learning environments by offering flexible pathways for instruction, engagement, and assessment. A growing body of research underscores UDL's substantial benefits, including enhanced student engagement, improved learning outcomes for diverse learners, greater accessibility to curriculum content, and fostering of learner autonomy and self-regulation. Beyond general education, UDL has demonstrated particular efficacy and shown its essence in English Language Learning (ELL) contexts globally, effectively addressing the varied linguistic and cultural needs of language learners. However, despite these compelling advantages, the widespread and sustainable implementation of UDL, especially in developing regions, faces considerable obstacles. These challenges primarily stem from financial issues, which limit access to specialized materials and technologies, alongside the perception that UDL demands extensive resources. Furthermore, the perceived burden on teachers, who often lack adequate training, time, and support for developing UDL-aligned curricula, presents another significant barrier. To mitigate these constraints and facilitate a more probable and scalable implementation of UDL in ELL programs across numerous countries, this paper proposes the strategic integration of Open Educational Resources (OER) as a pragmatic and cost-effective alternative. OER can provide readily available, adaptable, and free-to-use materials that align with UDL principles, thereby reducing financial strain, alleviating teacher workload, and promoting equitable access to high-quality, inclusive language education.

09:00-10:40 | Room 707 (7F)
Thursday Onsite Parallel Session 1
ACE2025 | Innovative Technologies in Education
Session Chair: Lili Luo

09:00-09:25
96920 | *Relationship of Professional Military Education and Generative Artificial Intelligence with Mission Analysis*
Pinky de Garcia, Ateneo de Manila University, Philippines

Generative Artificial Intelligence (GenAI) prompted the modernization of military instruction by improving situational analysis, expediting decisions, and understanding operational processes. Past studies highlighted the positive contribution of GenAI on military education and the challenges in the employment of the technology. However, these studies fail to identify its effect on military competencies included in the professional military education (PME). Considering the research gap, this study aims to analyze the relationship of GenAI usage and PME with mission analysis. The respondents were purposively selected to answer the validated survey. This study conducted preliminary analyses using descriptive statistics. The mission analysis (M=3.97, SD=0.436) indicated accuracy in analyzing data and showed low variation depicting strong and consistent responses. Both PME (M=2.08, SD=0.584) and frequency of GenAI usage (M=2.10, SD=0.515) indicated a slight increase from the median with low variation reflecting high consistency of responses from the participants. All the variables obtained p=<.001 showed a high statistical significance of the responses. The hierarchical regression revealed that the PME is a significant predictor in Model 1 (β =0.147, p= 0.038), but its effect becomes marginal when GenAI usage is added in Model 2(β =0.133, p= 0.064). Thus, GenAI usage has a low incremental contribution (ΔR2= 0.0063) and does not significantly predict the accuracy of mission analysis. Based on the results, this study suggests the enhancement of PME curriculum which include mission analysis in the military instruction and recommends the exploration of the effect of GenAI integration in other military competencies.

09:25-09:50
100698 | *Bridging the AI Skills Gap: A Theoretical Framework for Aligning University Business Education with Employer AI Expectations for Management Graduates*
Jason MacVaugh, Kwansei Gakuin University, Japan

The rapid proliferation of artificial intelligence (AI) across industries has created an unprecedented demand for AI-literate business and management graduates, yet limited theoretical understanding exists regarding alignment between university business education and employer AI expectations. This theoretical paper addresses this critical gap by developing a comprehensive framework for understanding AI competency requirements in business contexts and identifying key alignment challenges between educational preparation and workplace needs. Through synthesis of emerging literature in business education, workforce development, and AI implementation, we propose a three-domain model of AI competencies for business professionals: strategic AI application, ethical AI decision-making, and cross-functional AI collaboration. Our analysis reveals fundamental tensions between employer priorities for practical AI application skills and business school emphasis on technical AI understanding. We identify four critical alignment challenges: curriculum design mismatches, assessment methodology gaps, industry engagement deficits, and faculty preparedness limitations. The paper concludes with a comprehensive research agenda for empirically examining business education effectiveness in preparing graduates for AI-driven workplace environments. This work provides the first systematic theoretical framework for understanding AI competency alignment challenges specific to business and management education contexts.

09:50-10:15
97335 | *Empowering Business Students with Applied AI Skills: A "Classroom-in-Company" Teaching Model*
Shichang Deng, Shanghai University of International Business and Economics, China
Ling Liang, Shanghai University of International Business and Economics, China

As artificial intelligence (AI) becomes increasingly embedded in modern business operations, business schools face an urgent need to cultivate students' applied AI skills. However, most business students lack the technical foundation necessary to engage deeply with AI technologies, creating a gap between educational goals and student readiness. This paper introduces a pedagogical innovation—the Classroom-in-Company teaching model—designed to bridge this gap by integrating applied AI learning into business curricula in an accessible, practice-oriented way. The model breaks down complex AI technologies into business-relevant application modules aligned with core areas such as marketing, strategy, and customer analytics. Real-world cases and data sets are provided by corporate partners, enabling students to work with authentic problems and AI tools in realistic business settings. This approach emphasizes "learning by doing" and contextualizes technical content within familiar business logics, allowing students to understand not only what AI can do, but how to use it to create value in specific domains. The model was implemented in the undergraduate course Artificial Intelligence and Future Marketing at a leading business school in China. Evaluation data—including student surveys, classroom reflections, and employer interviews—indicate that the approach significantly enhances students' engagement, confidence, and practical readiness to use AI in their future careers. This paper details the model's instructional design, classroom implementation, and assessment outcomes, offering insights for educators seeking to empower business students with the skills necessary to thrive in AI-augmented work environments.

10:15-10:40
92890 | *Incorporating Generative AI in Teaching Survey Research: An Auto-Ethnographic Study*
Lili Luo, San Jose State University, United States

This auto-ethnographic study explores the integration of generative AI in a graduate-level class about survey research. The class is taught among students pursing master's degree in library and information science at an American university. AI integration in this class followed a phased approach: first, a sample questionnaire was generated by AI for students to pilot test, followed by a discussion on the potential and limitations of generative AI in survey design. A generative AI policy was then introduced to guide students' ethical and effective use of AI tools. In the final assignment of designing a survey consisting of mostly scaled-response questions (e.g., Likert scales, multiple-choice), students employed AI to brainstorm measurable concepts derived from their research questions and completed reflective exercises on their experiences with AI-assisted survey design. The focus of AI use was in assisting questionnaire design and survey data analysis was excluded from AI integration due to the limited scope of the class. Combining instructor observations, student reflections, and teaching artifacts, this study provides insights into how generative AI can be leveraged to enhance students' understanding of survey methodology. The auto-ethnographic approach offers a nuanced exploration of teaching with generative AI, highlighting its pedagogical value while addressing challenges in fostering critical engagement with emerging technologies. Findings contribute to ongoing discussions on AI in higher education, presenting practical strategies for educators while emphasizing the need for thoughtful policy frameworks. Through this self-reflective narrative, the study aims to inspire educators to explore innovative applications of generative AI in research-oriented courses.

09:00-10:40 | Room 708 (7F)
Thursday Onsite Parallel Session 1
ACE2025 | Education, Sustainability and Society
Session Chair: Çiğdem Suzan Çardakuzan Çardak

09:00-09:25
94615 | *Enriching DepEd Advocacies and Activities to Senior High School Specialized Biology Subjects Toward Sustainable Science Education*
Mayflor Agustin, Echague National High School, Philippines

To foster sustainable science education, this study aimed to enhance the Senior High School specialized Biology curriculum by integrating the Department of Education's (DepEd) environmental advocacies—Gulayan sa Paaralan, Brigada Eskwela, and Ecological Solid Waste Management. Utilizing a convergent mixed-methods design (Creswell & Creswell, 2023), the research reviewed and analyzed the alignment of these advocacies with the General Biology 2 curriculum competencies, developed instructional modules, and validated their effectiveness through expert evaluation. The findings revealed a strong alignment between the advocacies and the curriculum, particularly in areas related to plant biology, community engagement, and ecological balance. However, gaps were identified in translating advocacy objectives into practical classroom applications. Instructional modules were crafted using the ADDIE model as affirmed by Rogayan and Dollete (2019), emphasizing sustainability through experiential and real-world activities. These modules received an "excellent" rating in validation and evaluation, wherein minor recommendations for further refinement were addressed. The study culminated in an enriched curriculum that integrated advocacy-driven activities and aligned with sustainable development goals. This enriched curriculum bridges theoretical knowledge that promotes Sustainable Learning Education (SLE) with actionable practices, fostering critical thinking, creativity, and environmental stewardship among students. The study recommends pilot testing of the modules and continuous collaboration with stakeholders to ensure successful implementation and sustainability.

09:25-09:50
96912 | *Digital Engagement for Ocean Sustainability: The Efficacy of Social Media in Shaping Youth Awareness*
Nurul Hidayah Mat, Universiti Malaysia Terengganu, Malaysia
Mohd Yusri Ibrahim, Universiti Malaysia Terengganu, Malaysia
Che Hasniza Che Noh, Universiti Malaysia Terengganu, Malaysia
Izwandy Idris, Universiti Malaysia Terengganu, Malaysia
Najihah Abdullah, Universiti Malaysia Terengganu, Malaysia

Amid escalating threats to marine ecosystems, the active engagement of younger generations has become imperative for ensuring the long-term sustainability of the oceans. This study examines the critical role of social media platforms in fostering awareness and promoting youth engagement in marine life conservation. Specifically, it investigates how digital platforms serve as vehicles for disseminating information, facilitating environmental education, and mobilizing collective youth action. A structured survey was administered to a diverse cohort of 500 participants across various Malaysian states between April and June 2023. The data were systematically analyzed using SPSS Version 27.0 to identify prevailing patterns in social media usage and its impact on conservation awareness. The findings reveal that social media—particularly TikTok—emerges as a highly influential platform in advancing marine conservation discourse among youth. The study highlights the effectiveness of engaging, visually driven content in cultivating environmental consciousness and motivating behavioral change. These results underscore the transformative potential of social media as a tool for public environmental engagement and call for more targeted, evidence-based strategies to harness digital platforms in marine conservation efforts. Continued interdisciplinary research is recommended to further explore the intersection of digital communication and ecological stewardship.

09:50-10:15
94768 | *Empowering Minds, Sustaining Environments: Advancing Pro-Environmental Behaviour in Organizations*
Juhari Noor Faezah, Universiti Kebangsaan Malaysia, Malaysia
Mohd Yusoff Yusliza, Universiti Malaysia Terengganu, Malaysia

Environmental concerns have led organizations worldwide to adopt Environmental Management Systems (EMS), emphasizing the critical role of employee green behaviour in their success. Grounded in the Ability-Motivation-Opportunity (AMO) Theory, this study examines the impact of green employee empowerment on pro-environmental behaviour, with green human resource management (Green HRM) as a mediating factor within higher education institutions. A cross-sectional quantitative survey was conducted among 308 academic staff members from universities in Malaysia. Data analysis was performed using Smart Partial Least Squares (PLS) version 3.3.3. The findings reveal that green employee empowerment positively influences perceptions of Green HRM. Additionally, Green HRM significantly enhances pro-environmental behaviour and fully mediates the relationship between green employee empowerment and pro-environmental behaviour. This study contributes to both theory and practice. Theoretically, it strengthens the AMO framework by integrating Green HRM as a key mechanism linking empowerment and ecological behaviour. Practically, the findings offer valuable insights for higher education institutions and policymakers, emphasizing the importance of green policies to cultivate sustainable workplace behaviours. Future research should consider broader sample sizes and diverse educational groups to deepen the understanding of ecological behaviour across different institutional settings.

10:15-10:40
97388 | *Exploring Teacher Competencies in Ecopedagogy: Insights from Expert Perspectives*
Çiğdem Suzan Çardak, Anadolu University, Turkey
Remzi Yılmaz, Anadolu University, Turkey
Bülent Alan, Anadolu University, Turkey

The degradation of ecosystems due to human activities, alongside biodiversity loss and climate change, has made green transformation and sustainable development critical priorities in education. Despite increasing awareness, current educational initiatives remain inadequate in addressing the root causes of these crises and fostering transformative societal change. Ecopedagogy, grounded in critical pedagogy, presents an alternative educational paradigm that emphasizes respect for both humans and nature, aiming to support a sustainable future. Integrating ecopedagogy into educational policies and teaching practices can enhance sustainability across environmental, social, economic, and cultural dimensions. In this regard, teachers are expected to possess specific competencies aligned with ecopedagogical principles. However, the literature lacks a clear consensus on the knowledge, skills, and attitudes teachers should demonstrate in this context. This study seeks to identify the sub-dimensions of ecopedagogy and the associated teacher competencies through a qualitative research design. Semi-structured interviews are being conducted with approximately 25 experts from various countries. The data are being analyzed using thematic analysis. Preliminary results indicate that expert views cluster around four main categories: the transformative role of education in sustainability, education for ecological sustainability, sub-dimensions of ecopedagogy, and teacher competencies in terms of knowledge, skills, and attitudes. The results of the study is expected to contribute to identifying the necessary teacher competencies for the effective implementation of ecopedagogy. These insights may shed light on the teacher competency frameworks, the development of ecopedagogical teacher competency scales, the development of curricula for initial and in-service teacher education, and future education policies that support sustainability.

10:55-12:10 | Room 601 (6F)

Thursday Onsite Parallel Session 2

ACE2025 | Writing a Successful Grant Application: Mastering Significance, Innovation, and Approach for Your Career (Workshop)

10:55-12:10

101668 | *Writing a Successful Grant Application: Mastering Significance, Innovation, and Approach for Your Career*

James McNally, University of Michigan, United States
Sela Panapasa, University of Michigan, United States
Lowell Sheppard, IAFOR, Japan

The ability to write, submit, and administer research grants has become increasingly a vital role in developing an academic career. Funders seek good ideas and innovative approaches that enhance research designs, classroom pedagogies, student and professional growth, conference development, and travel. The wide array of organizations representing potential funders can be summarized as federal or governmental awards, foundation or philanthropic awards, and private business awards. Typically structured as contracts, grants, or gifts, these mechanisms have critical distinctions, often requiring very different deliverables and outcomes expectations. The mechanism will also impact the fungibility of the provided funds to accomplish the project goals. While the rules, expectations, and procedures for grant applications will vary internationally, organizationally, and internally, the basics of grantsmanship all share commonalities regarding significance, innovation, and approach. Understanding and mastering these skills will enhance and expand an applicant's capacities as an instructor, mentor, and researcher. This workshop will offer training, guidance, and opportunities to discuss grantsmanship as an integral part of the learning process and a critical element of academic advancement. The workshop will review identifying funders who best reflect research interests, interacting with funding agencies, and ways to build funding networks. It will discuss the critical elements for developing a successful grant application and effectively budgeting requested funds. The workshop will also offer time management tips for meeting deadlines and ensuring applicants have crossed all "t's" and dotted all "i's."

Learning Objectives:
- Participants will receive training, guidance, and opportunities to discuss grantsmanship as an integral part of the learning process and apply this knowledge as a critical element facilitating academic advancement and advocacy.

- Participants will apply tools for identifying funders who best reflect research interests, interacting with funding agencies, and building funding networks.

- Participants will apply knowledge from established grant writers on developing a successful grant application and effectively budgeting requested funds.

- Participants will apply time management tips for meeting deadlines and ensuring applicants have crossed all "t's" and dotted all "i's."

Target Audience:
Academics, students seeking funding, community activists, and anyone interested in developing funding to support their research or outreach activity.

Workshop Structure:
Lecture and example-driven with an open question-and-answer format allowing participants to shape discussion.

Learning Resources:
All materials will be available online and by email, including grant links, PowerPoint slides, and examples.

10:55-12:10 | Room 603 (6F)
Thursday Onsite Parallel Session 2
ACE2025 | Higher Education
Session Chair: Sweta Mukherjee

10:55-11:20
97505 | *Say Goodbye to Academic Orphans, AI Is the Best Advisor: An Investigation of AI in Academic Mentorship*
Kross Wen, University of Texas at Austin, United States

Many graduate students navigate their academic journey in isolation, lacking sustained mentorship or timely feedback—what we refer to as "academic orphans." This study investigates how Artificial Intelligence (AI), particularly generative language models, is transforming the advisor–advisee dynamic in higher education. Drawing on in-depth interviews with 30 master's and doctoral students who regularly use AI tools, alongside a survey of 200 postgraduate students in China, we examine the emotional, cognitive, and practical dimensions of AI-assisted academic work. Findings reveal that AI provides 24/7 guidance, supports writing and ideation, enhances confidence in academic communication, and fills the gaps left by unavailable or disengaged human advisors. While AI cannot fully replace human mentorship, it significantly alleviates the sense of academic orphanhood experienced by many students. We argue that AI should be seen not merely as a tool, but as a scalable, ethical co-mentor—especially critical in under-resourced or high-pressure graduate programs. AI companionship contributes to greater academic resilience. Theoretical and practical implications are discussed.

11:20-11:45
94802 | *Thesis and Dissertation Advising Preferences and Best Practices in the Philippines*
Maria Salud Delos Santos, Cebu Technological University, Philippines

This study determined the thesis and dissertation advising preferences of graduate students enrolled in selected private and state universities in Cebu and Palawan and the best practices of their research advisers. It anchors on the Expectancy-value Theory developed by Eccles et al. (1983) which postulates that achievement-related choices are motivated by a combination of people's expectations for success and subjective task value in particular domains. Expectancy relates to the graduate students' beliefs about their ability to complete their thesis or dissertation. The quantitative descriptive survey design was employed to gather data among 70 graduate students who have enrolled in thesis or dissertation seminars utilizing an adapted and validated instrument with a Cronbach alpha of 0.82 reliability coefficient. Data were analyzed using descriptive statistics and themes were generated from the interviews with the participants. The findings revealed the top three advising preferences: coaching and mentoring abilities, field of specialization, and availability. The themes generated were: Pass on the Best Practices, The Six Cs of Advising, Respect begets Respect, and Have Fund and Enjoy the Journey. The study concludes that recognizing and addressing the diverse advising preferences of graduate students is important in fostering a supportive academic environment that enhances student achievement and satisfaction. The study recommends a thesis and dissertation advising handbook.

11:45-12:10
96531 | *Mentor–Mentee in a Collaborative Anthrogogical Relationship to Develop a Supportive Professional Community*
Sweta Mukherjee, Gitam University, India
Pradeep Kumar R, Gitam University, India

In teacher education literature, mentoring is defined as a hierarchical relationship where a more knowledgeable other guides another's development. This study reimagines mentoring as a collaborative, transformative process grounded in anthrogogy- an inclusive, learner-centered approach that values mutual respect, co-created knowledge, and recognizes that adult learners are still navigating identity, independence, and emotional development. Unlike traditional pedagogy, anthrogogy responds to the diverse lived experiences and needs of today's learners with empathy and flexibility. The study draws on the researchers' experience of mentoring 24 adult learners in a nine-month long post graduate teacher education program at an institution in India. The mentees, aged between 25-45, came from diverse professional backgrounds and were transitioning into educators. Data were collected through one-on- one mentoring sessions, professional development portfolios, and reflective essays. Based on inductive thematic analysis, mentees' responses were analyzed to reveal the meaning of mentoring, the characteristics of an effective mentor, and the impact of mentoring. Findings suggested that mentees valued individual attentions and discussions with mentors, developed greater self-awareness, critical thinking, and emotional resilience. For instance, one mentee shared that reflective dialogues helped them "reclaim a sense of voice" in academic setting. Instances of reverse mentoring- where mentors learned from mentees- highlighted the reciprocal nature of mentoring. By positioning mentorship as a dialogic and humanizing relationship, this paper challenges the traditional supervisory models of mentoring. It calls for mentoring practices that decentralize authority, foreground empathy and honor the agency of both the mentor and the mentee.

10:55-12:10 | Room 604 (6F)
Thursday Onsite Parallel Session 2
ACE2025 | Professional Training, Development and Concerns in Education
Session Chair: Alfredo Diaz

10:55-11:20
97463 | *Exploring Technical Vocational Teacher Education: Inputs to Curriculum Model Development*
Nilmar Moreno, Rizal Technological University, Philippines
Romelyn Callueng, Rizal Technological University, Philippines
Apollo Portez, Technological University of the Philippines, Philippines

The global demand for skilled workers, particularly in digital sectors, is projected to increase significantly, with an estimated 92 million digital jobs expected by 2030, according to the World Economic Forum. This trend presents a unique opportunity for countries like the Philippines to enhance their Technical and Vocational Education and Training (TVET) systems to meet evolving global labor market needs. Hence, this study endeavoured the development of a comprehensive, research-based curriculum model for the Bachelor of Technical-Vocational Teacher Education (BTVTEd) program in the Philippines. Using an exploratory sequential mixed-methods approach, the research examined current challenges, and the extent of knowledge, experiences, and practices within the BTVTEd curriculum by gathering insights from experts in universities across the country. The findings reveal that the main challenges identified by respondents are related to curriculum and program design, particularly in adapting to industry demands. However, issues related to resources and facilities were also highlighted as central concerns. The study further underscores the need for the inclusion of emerging key courses, such as research, innovation, sustainability, and regulatory frameworks, alongside strengthening core areas like pedagogy, instructional design, and personal and professional development. Additionally, the study identified prominent factors, practices and strategies used to improve the BTVTEd program. Based on these findings, a new curriculum model is proposed, aimed at strengthening the current technology education program. The study suggests further exploration on how universities balance the use of quality assurance practices in curriculum delivery. The results provide valuable insights for the continued development of technology education.

11:20-11:45
97473 | *Turning Passion into Action: The Story of Edupreneurs in the Philippines*
Merriam Silin, Polytechnic University of the Philippines, Philippines

Educational Entrepreneur or edupreneur is a person within the school organization who has outside entrepreneurial activities or business that is related to education, teaching, or learning. This research aimed to account for the lived experiences of the participants before they have become edupreneurs. This study utilized the Interpretative Phenomenological Analysis (IPA) which is a qualitative approach that aims to provide detailed examinations of the personal lived experience of the participants. Interviews, observation recorded in the field notes, theoretical memos, and narrative reflection were used as Methodological Triangulation to facilitate cross-validation and saturation. Five edupreneur participants from the National Capital Region, and the Province of Rizal from the Philippines were asked of their experiences of the said phenomenon. Findings revealed that the participants before becoming edupreneurs have had a positive attitude and feeling towards teaching and learning, they dreamed big but started small, they were molded by crisis, challenges, and rejections in life. Furthermore, they were driven by their bright ideas, and have lived their lives for others. With the results, a specialized entrepreneurial platform could be built and maintained, showcasing existing successful school-edupreneur partnerships and projects, projecting future plans, and forecasting trends and needs which will contribute to the promotion and preservation of this kind of entrepreneur in the country.

11:45-12:10
101492 | *Breaking the Wall: Creativity in Teaching Language and Literature*
Alfredo Diaz, University of the Philippines, Philippines

This paper investigates the role of creativity in teaching literature. Specifically, it looks at how theatre is used as an engagement tool in teaching high school literature courses at the University of the Philippines Visayas High School in Iloilo (UPHSI), one of the major secondary schools in the Philippines. For this paper, the researcher interviewed five faculty who teach all the high school literature classes at the UPV totaling to 425 students. These courses are Asian Literature, African Literature, Anglo-American Literature, World Literature, and 21st Century Literature. The teachers were asked to answer questions that are related to their experience in using theatre in their classes. Additionally, the researcher set a focus group discussion with the teachers to further explain the partnership of theater and teaching. The discussion focused on how the teachers handled their literature classes, especially how they integrated the elements of theatre in class activities. They also shared the challenges they encountered.
The following findings, based on the discussions, show the importance and relevance of using theater in teaching literature such that
1. It gives the students a more engaging context in their activities; thus, they are greatly helped in their understanding and appreciation;
2. It allows them to better demonstrate their writing and speaking skills in various contexts;
3. It gives them a meaningful venue to develop their skills to interpret and analyze.
The research will add to the pedagogical resources for teachers of literature and of other courses to make teaching more engaging and relevant.

10:55-12:10 | Room 605 (6F)
Thursday Onsite Parallel Session 2
ACE2025 | Service Learning
Session Chair: Myra Patambang

10:55-11:20
100778 | *Empowering Global Citizens Through Multidisciplinary Collaboration in Education for Sustainability: Insights from the Learning Express (LeX) Programme*
Harveen Kaur, Singapore Polytechnic, Singapore

The Learning Express (LeX) programme at Singapore Polytechnic is a multidisciplinary overseas service-learning initiative that engages students in sustainable innovation projects across the ASEAN, China, and India (ACI) region. Through the Design Thinking process, students collaborate in cross-disciplinary teams with overseas partner institutions to co-create sustainable solutions for global communities to address real-world challenges aligned with the United Nations' Sustainable Development Goals (SDGs). This immersive experience fosters cultural empathy, global awareness, and practical problem-solving skills. The programme's emphasis on multidisciplinary teamwork is pedagogically essential. Students from varied academic backgrounds bring unique perspectives to complex sustainability challenges, enabling holistic problem-solving that reflects the interconnectedness of environmental, social, and economic dimensions. This aligns with ESD's principles of holism and pluralism, which encourage learners to consider multiple viewpoints and systemic relationships. Using a mixed-methods approach, the study involved a survey of 336 students and interviews with selected participants. Results showed that 95% of students reported increased awareness of global socio-economic environments, and 97% recognised the complexity of global issues. Additionally, 90% felt they had gained work-related skills such as project management and communication—skills vital for future employment and civic engagement. Facilitators played a key role in guiding students through multidisciplinary collaboration, helping them navigate cultural contexts and apply theoretical knowledge to practical challenges. LeX's team-based, multidisciplinary approach is central to its success in delivering education for sustainability and preparing students to become proactive global citizens.

11:20-11:45
96037 | *Education that Upskills: Community Service Project as a Critical Enabler of Students' Self-Confidence Growth*
Martin Sviatko, CamEd Business School, Cambodia

This study aims to elucidate how undergraduate students develop self-confidence through their involvement in a specific project-based learning activity in the form of a community service project. The quantitative study employs a descriptive research design and uses two surveys for data collection. Applying the convenience sampling method, the first self-administered Likert-scale questionnaire – conducted in a paper-and-pen format in May 2024 – was distributed to 190 full-time university students to establish a baseline assessment of their self-confidence before the community service project. The second survey, consisting of a Likert-scale question and one open-ended question designed to gather storytelling insights, was administered to the same respondents in June 2024, shortly after the completion of the project. To track changes in respondents' perceptions over time and provide a single summary measure, the study utilized the mean in the Likert-scale analysis. The findings from both surveys revealed a 14.93 percent increase in the mean self-confidence score due to the students' involvement in project-based learning activities. Thus, this paper contends that a thoughtfully integrated community service project not only serves as a key enabler of self-confidence growth but also establishes a solid foundation for developing this and other emotional competencies in learners. Because this form of learning equips students with a lasting learning dividend that extends beyond their academic life and performance, the paper contributes to the ongoing pedagogical discourse on the pivotal role educational institutions play in upskilling students enrolled in undergraduate programs and other tertiary education courses.

11:45-12:10
98158 | *Traces of Gen Z Spirituality and Social Responsibility in a Service-learning Activity*
Myra Patambang, De La Salle Medical and Health Sciences Institute, Philippines

Spirituality of Social Transformation (RED 103) is the last of the nine-unit Religious Education program offered to all the undergraduate colleges of De La Salle Medical and Health Sciences Institute, a member school of De La Salle Philippines. The final output is an application of theories and concepts learned in the classroom. The goals and objectives of the said output are made clear since day one. From their own pockets, initiatives, creative ideas and personal sacrifices, the students raise a certain amount of money to finance the project. After a few months of preparation and meticulous engagement in the different committees, each class gets a chance to serve an average of 10 children from a partner-public elementary school. The kids are generally not well-off. This half-day service includes prayers, catechesis, values education, parlor games, taking good care of the kids, feeding and gift-giving. Following the four-step cycle of Christian praxis, the students wrote their reflection papers. Their essays describe their experiences and portray the framework of immersion, social analysis, theological reflection and Christian response. Utilizing content analysis as the research method, twenty-nine (29) narratives were systematically coded and analyzed in this paper. Emerging patterns, concepts, themes and trends were identified. The narratives revealed the characteristics of Gen Z, their notion of spirituality and a very strong sense of social responsibility among others. It can be deduced that service-learning is a powerful tool in educating the mind and the heart of today's generation.

10:55-12:10 | Room 607 (6F)

Thursday Onsite Parallel Session 2

ACE2025 | Educational Policy, Leadership, Management and Administration

Session Chair: Jan Eliezer Michael Samala

10:55-11:20
100207 | *Enhancing Leadership in the Academe Through Self-Assessment: Exploring Effective Educational Practices*
Hazel Samala, Polytechnic University of the Philippines, Philippines

Self-assessment empowers educational leaders by engaging them in reflective self-evaluation, enabling deeper insights into their leadership styles. This study examines the level of leadership competencies of academic leaders as measured through self-assessment. Anchored in Kolb's Experiential Learning Theory, Schön's Reflective Practice Theory, and Blake and Mouton's Managerial Grid Theory, the study employed a descriptive research design and purposively selected 48 respondents, including faculty members, program coordinators, assistant principals, and principals. The Blake and Mouton Managerial Grid Leadership Self-Assessment Questionnaire, composed of 18 statements on leadership behavior, was used to determine the extent to which respondents prefer working with tasks and people, and to identify their leadership dimensions. Results indicate that academic leaders consistently demonstrate leadership competencies in the performance of their duties. Moreover, the level of leadership competencies, as measured through self-assessment, did not significantly vary according to respondents' profile variables specifically, position and length of service. These findings suggest that leadership skills are being developed evenly across positions and tenure levels, implying that leadership development opportunities and experiences may be accessible and impactful throughout the academic hierarchy. Further, based on Blake and Mouton's Managerial Grid, most respondents were identified as "team leaders", leaders who lead by positive example, foster an environment that enables members to reach their highest potential, be productive educators, and promote collaboration and strong interpersonal bonds. However, respondents also face challenges in jeopardizing relationships while correcting the mistakes of their subordinates. Thus, building a good relationship and conducting proper coaching and mentoring programs is recommended.

11:20-11:45
96847 | *Unlocking the Enigma: the Unwillingness of Male High School Students to Become Teachers*
Mona Aljanahi, United Arab Emirates University, United Arab Emirates
Ahmed Akaabi, United Arab Emirates University, United Arab Emirates
Mohammed Aljanahi, United Arab Emirates University, United Arab Emirates
Hala Elhoweris, United Arab Emirates University, United Arab Emirates
Ali Ibrahim, United Arab Emirates University, United Arab Emirates

There is a large gender discrepancy in the field of education in the United Arab Emirates, with much fewer male teachers than female ones. This study examined perceptions of the teaching profession among male Emirati high school students, seeking to determine the reasons for their reluctance to enroll in related programs or pursue teaching as a career. This study used a mixed methods approach comprising surveys and focus group interviews. With these tools, it investigated how male students perceived education as a career path, identified demographic factors that influenced their decisions, and explored ways to attract them to the profession. The results show that while students considered teaching to be a suitable career for men, their families generally did not encourage the pursuit of this occupation, even though they saw it as an appropriate career path. Participants indicated also other deterring factors, such as teaching's lack of social prestige, low pay, and limited career-growth prospects. Ultimately, the participants said that they were not in favor of pursuing teaching as a career path. Based on the study's findings, it is recommended that policymakers and stakeholders understand the complexity of the phenomenon in question. Initiatives should be implemented to address the stereotypes harming teaching as a profession by raising awareness of it and incentivizing those inclined to choose this path.

11:45-12:10
100208 | *The Role of Graduate Education in the Professional Development of Filipino Teachers*
Jan Eliezer Michael Samala, Polytechnic University of the Philippines, Philippines

Graduate education plays a vital role in equipping individuals in their chosen career. It provides opportunities to enhance their skills, knowledge, and overall effectiveness in an organization. Anchored to Malcolm Knowles' Adult Learning Theory and Abraham Maslow's Hierarchy of Needs, this study focuses on the role of graduate education in the professional development of Filipino teachers. Utilizing descriptive research, a total of 85 Filipino teachers pursuing graduate education was surveyed from selected public schools in the country. Results of the study show that graduate education enhances teachers' specialized skills; elevates their professional growth through becoming better educators and leaders in their organizations; and being self-fulfilled in their own fields. Further, there is a strong and significant relationship between pursuing graduate education and the respondents' specialized skills, professional development, and self-fulfillment despite the challenges they encounter. Further, the findings of the study call for strengthened graduate education and educational programs that will assist teachers finish their degrees to be more effective and productive in their organizations.

10:55-12:10 | Room 608 (6F)
Thursday Onsite Parallel Session 2
ACE2025 | Higher Education
Session Chair: Kennet Cuarteros

10:55-11:20
100259 | *Strategic Guidance and Disciplinary Integration: Shaping Doctoral Training Spaces in National Laboratories*
Xinyu Lu, Zhejiang University, China
Chenghua Lin, Zhejiang University, China

Why do national laboratories across different countries exhibit significant variations in doctoral education? Why do doctoral training models within the same national laboratory undergo substantial changes across different historical periods? Through controlled comparisons of the US Department of Energy National Laboratories (during and after the Cold War), the French Alternative Energies and Atomic Energy Commission, and Japan's RIKEN, based on field research and policy documents, this study identifies two key explanatory variables: the intensity of national science and technology strategic guidance and the degree of interdisciplinary integration within laboratories. Different combinations of these independent variables shape four distinct innovation spaces for doctoral education in national laboratories: open, closed, state-led limited open, and laboratory-led limited open types. The main contributions of this research include: First, proposing the analytical framework of "doctoral training innovation space" to reveal the diversity and formation mechanisms of talent cultivation in national laboratories; Second, while previous research has primarily focused on doctoral education in universities, this study concentrates on the unique field of national laboratories, enriching perspectives on science-education integration; Third, existing literature mainly adopts single case studies or synchronic comparisons, whereas this research combines cross-national and diachronic comparisons to demonstrate the dynamic evolution of training models. Through this comparative study, theoretical insights and practical references are provided for China's efforts to build a world-class national laboratory system and establish an efficient doctoral training model.

11:20-11:45
97310 | *Balancing Engagement and Anxiety: Understanding Student Perceptions and Instructor Expectations of Class Participation*
Ameek Kaur, National University of Singapore, Singapore

Class participation is a widely used assessment component in business education, intended to foster engagement, critical thinking, and communication skills. However, many students experience significant stress related to participation, often speaking just to meet grading expectations rather than engaging meaningfully. Through interviews with NUS BBA students and faculty members, this research investigates (1) student perceptions of participation stress, motivation, and learning benefits, (2) faculty expectations and realities in assessing participation, and (3) potential gaps between these perspectives. This study applies Self Determination Theory to examine how intrinsic and extrinsic motivation influence participation, while also considering theories of communication apprehension and cultural learning styles. The study aims to provide insights into reducing participation-related stress while enhancing its pedagogical effectiveness. The early insights from this research reveal three main tensions – mismatch between instructor intensions and student experience, structural and social barriers to engagement, student preference for inclusive and low-pressure environments. Further insights and recommendations will be shared during the presentation.

11:45-12:10
98305 | *Exploratory Factor Analysis on Young Adult School Non-attendance in Cagayan De Oro City, Philippines*
Kennet Cuarteros, University of Science and Technology of Southern Philippines, Philippines
Roneth Capundag, University of Science and Technology of Southern Philippines, Philippines

Education remains a pivotal force in shaping individual potential and advancing national development. However, many young adults in Cagayan de Oro City, particularly in densely populated and low-income urban barangays such as Bulua, Kauswagan, Lapasan, and Carmen, continue to face significant barriers to accessing higher education. This study aims to identify and analyze the root causes of college non-enrollment among 18- to 24-year-old out-of-school youth in these areas through the application of Exploratory Factor Analysis (EFA). A total of 276 participants responded to a 30-item Likert-scale questionnaire designed to assess various factors influencing their educational decisions. EFA revealed a clear four-factor model encompassing Financial Barriers, Personal Barriers, Academic Barriers, and Information and Guidance Barriers. These dimensions encapsulate interconnected challenges, including economic hardship, the pressure to earn income, mental health struggles, poor academic performance, and limited access to information on scholarships and college admissions. The model demonstrated a strong fit (KMO = 0.870, RMSEA = 0.0268), lending statistical support to the validity of the findings. The study offers localized, evidence-based insights into the complex interplay of socio-economic, psychological, and institutional factors contributing to educational disengagement. By highlighting these systemic barriers, the research aims to inform education policy and guide the efforts of local government units, non-governmental organizations, and higher education institutions in creating targeted, context-sensitive interventions. Ultimately, the study underscores the importance of addressing the multifaceted challenges that impede college access to foster greater inclusion and equity in the educational landscape of Cagayan de Oro City.

10:55-12:10 | Room 702 (7F)
Thursday Onsite Parallel Session 2
ACE2025 | Special Topics in Education
Session Chair: Pin-Ju Chen

10:55-11:20
96082 | *Exploring Teachers' Views on Artificial Intelligence (AI) Integration: Basis for Policymaking*
Kris Oshin Lagare, Malaybalay City National Science High School; Central Mindanao University, Philippines
Ma. Vivienne Segumpan-Salon, Central Mindanao University, Philippines

Artificial Intelligence has become a tremendous aid for both teachers and students in this generation. Hence, this study was conducted to investigate teachers' views on integrating AI into teachers' teaching practices. It also examined teachers' concerns and reservations about AI tools, and their suggested policies to guide policymakers in successfully integrating AI in schools. Using a qualitative case study methodology by Creswell, the data were gathered through semi-structured interviews with five teachers from Malaybalay City National Science High School. The findings highlighted the different AI tools the teachers were using, including ChatGPT, Perplexity, Poe, Notion, CANVA AI, Bing AI, QuillBot, Elicit, and Consensus. It also found several concerns, including overreliance on technology, inadequate training, ethical dilemmas, and diminished students' interpersonal skills. The positive influence of AI on improving the educational landscape is also evident, which is why it is important to know how to properly use AI tools to avoid the possible risks they bring. That is why one of the recommendations was the need for thoroughly structured and well-planned professional development activities and programs for teachers. Programs that offer workshops, training, and practical experiences to give teachers the know-how to incorporate AI tools into their lesson plans successfully. Explicit ethical guidelines must be provided to guarantee that AI tools are utilized correctly and protect teachers' and students' privacy and well-being. Policies that promote the successful integration of AI in the academe are essential to create a dynamic environment where teachers and students can thrive with the help of technology.

11:20-11:45
101025 | *The Status of Digital and Information Literacies in South Africa from 2019 to 2024*
Blessing Mbatha, University of South Africa, South Africa

This study sought to examine the extent of the rollout of digital skills in South Africa, the top digital skills produced, and the number of beneficiaries of the digital skills programmes between 2019 and 2024. The study adopted a quantitative content analysis and analysed the date through descriptive statics. The following objectives were addressed: identify digital skills training providers in South Africa. The study found that several stakeholders were involved in providing digital skills in the country, that is, SETAs; Google; Banks; tertiary institutions; Huawei; Microsoft; to name but a few. Another objective of the study was to determine the kinds of digital skills offered to South Africans. The results show that a variety of digital skills were offered. The third objective of the study was to determine the number of South Africans who were equipped with digital skills between 2019 and 2024. The results show that SETAs trained more South Africans (2,457,743) than any other organisation in the country, followed by Google with 500,000 South Africans. The fourth objective of the study was to determine the impact of the digital skills that were provided between 2019 and 2024. The study found that 2,069,013 job opportunities were created. The study found that digital skills training offered by several training providers empowered South Africans to adapt to shifting roles, embrace emerging technologies and drive innovation.

11:45-12:10
101720 | *Engagement Through Ownership: Preservice Teachers' Experiences with Problem-Based Learning*
Pin-Ju Chen, Ming Chuan University, Taiwan

"Learning by doing" has been advocated as an effective pedagogical approach. Yet, preservice teacher education often faces practical constraints that limit opportunities for authentic classroom practice, which are essential for developing teaching and classroom management skills. Problem-Based Learning (PBL) has been proposed as a promising strategy to bridge this gap by engaging preservice teachers in addressing real-world problems. This study investigates how the source and nature of PBL problems influence preservice teachers' engagement and learning outcomes in a teacher education course. Totally 14 preservice teachers from diverse disciplinary backgrounds and with varying levels of teaching experience participated in this qualitative case study. While some participants contributed authentic teaching problems to be explored in PBL activities, others did not, thus enabling comparative analysis across cases. Data were collected from video recordings of PBL sessions, participants' reflective journals, and semi-structured interviews with four selected students. The data were coded and thematically analyzed. Findings indicate that participants generally held positive attitudes toward PBL. Students who contributed to problems expressed higher satisfaction with the course, although both generating and solving problems fostered meaningful learning experiences. The results highlight the central role of learners' attitudes and interests, suggesting that problem ownership influences engagement in various ways.

10:55-12:10 | Room 703 (7F)
Thursday Onsite Parallel Session 2
ACE2025 | Adult and Special Education
Session Chair: Hasan Aydin

10:55-11:20
97027 | *Embracing Aging Through Lived Experience: Elderly Fulfillment Narratives as Foundations for Educational and Community-Based Interventions*
Jennylou Dela Rosa, La Consolacion University, Philippines
Clarissa Delariarte, Holy Angel University, Philippines
Janne Andre Magpantay, Holy Angel University, Philippines
Sarah Tan, Holy Angel University, Philippines
Benedick Aguilar, Holy Angel University, Philippines
Frederick Dennis Mercado, Holy Angel University, Philippines

As the global population ages, including in the Philippines, the roles of psychology, social work, and health sciences professionals become increasingly crucial. Their work is integral in promoting the well-being of the elderly. This study delves into how elderly Filipinos perceive life fulfillment, focusing on positive emotions, social engagement, and a sense of purpose. Using a qualitative phenomenological approach, in-depth interviews were conducted with 15 elderly individuals from Central Luzon. The results revealed that family support, spirituality, and community involvement are central to their sense of fulfillment and present opportunities for enhancing their well-being. Conversely, social isolation and financial insecurity, while challenges, can be addressed through targeted interventions. The study underscores the transformative potential of integrating gerontological content into educational programs in psychology, social work, health sciences, and education. This integration can equip future professionals with the empathy, cultural awareness, and skills necessary to address aging populations' emotional, cognitive, and social needs, inspiring them to make a significant difference in the lives of the elderly. Ultimately, the study supports the development of community-based interventions and learning materials, such as the educational guide 'Embracing Aging,' which draws directly from elderly narratives and promotes positive aging by providing practical advice, psychological insights, and cultural perspectives. These initiatives can contribute to building more age-inclusive, compassionate, and culturally grounded professional practices.

11:20-11:45
96348 | *A Class Observation of Adult Learning the Grammar of Paiwan — an Indigenous Language in Taiwan*
Diana Po Lan Sham, Hong Kong Chinese Institute of Engineers, Hong Kong

In Taiwan, there are 16 indigenous tribes as each tribe has their own language which varies according to areas. Comparatively speaking, Paiwan language is popular because Paiwan has the third largest population among the indigenous tribes. Similar to other Taiwanese indigenous language of the Austronesian language family, Paiwan has no writing system and the present Paiwan alphabets are borrowed from Latin scripts. Nowadays, Paiwan language is separated into East Paiwan, North Paiwan, Middle Paiwan and South Paiwan, and this class focused on teaching and learning East Paiwan language. According to the curriculum, Taiwanese students can choose to study any indigenous language from primary school, junior school to high school but not compulsory. In university, there are bachelor, master and even Ph.D. degrees for major in indigenous languages and studies. Besides, local and indigenous people can learn indigenous languages, culture and crafts through adult learning. This study consists of an interview among the instructor as well as a 2-hour class observation of teaching and learning of the grammar of Paiwan observed by the author from Melbourne in The Indigenous Education and Culture Research Center, National Taichung University of Education in Taiwan. The 2-hour session was divided into two: First, focus on teaching and revision of pronouns and grammar; second, all students' sentence making in the last assignment were marked and discussed thoroughly and interactively in a friendly atmosphere. This report could be a reference for adult teaching and learning grammar of other indigenous languages across tribes and countries.

11:45-12:10
101249 | *Intellectual Exile: The Journey of Displaced Gifted Academics from Turkey*
Hasan Aydin, Florida Gulf Coast University, United States
Uzeyir Adam Ogurlu, Utah Valley University, United States
Bruno Halpern, Florida Gulf Coast University, United States

This study explored the lived experiences of academically gifted adults from Turkey who, after ranking in the top 1% in the nation-wide university entrance examination (UEE), were compelled to leave their country due to political issues. By delving into their narratives, the research sheds light on the multifaceted challenges they face, including identity reconstruction, integration into new societies, and the pursuit of professional fulfillment. Insights gained from this study will contribute to the broader discourse on supporting displaced gifted individuals, informing educators, policymakers, and mental health professionals dedicated to fostering their well-being and potential. This study employed a phenomenological research design using semi-structured interviews to explore the lived experiences and life stories of nine academically gifted Turkish scholars who were displaced following political persecution from Turkey. After analyzing the data, three major themes emerged, including Displacement as a Disruption of Academic and Personal Identity, Psychological Toll and Resilience Amid Systemic Exclusion and Educational Privilege, and the Burden of Giftedness in Exile. This study reveals that exile is not just a political or geographic shift for displaced gifted Turkish academics, but a deeply existential rupture. Their lived experiences reflect profound identity fragmentation, systemic marginalization, and intellectual displacement. Nevertheless, their narratives also demonstrate resilience and a reimagining of academic purpose in foreign contexts.

10:55-12:10 | Room 704 (7F)
Thursday Onsite Parallel Session 2
ACE2025 | Knowledge Creation, Preservation and Access
Session Chair: Christine Abrigo

10:55-11:20
96888 | *Mapping IDEA in Collection Development: A Scoping and Bibliometric Review*
Efren Torres Jr, De La Salle University, Philippines
Janice Peñaflor, De La Salle University, Philippines

This study conducts a scoping and bibliometric review of literature on Inclusion, Diversity, Equity, and Accessibility (IDEA) in library collection development from 2001 to 2025. Based on 114 Scopus-indexed journal articles, it maps publication trends, identifies influential contributors, and analyzes research methodologies and thematic directions using keyword co-occurrence and citation network analysis. The findings reveal sustained growth in IDEA-focused scholarship, particularly within academic libraries, with qualitative methods predominating. Three thematic clusters were identified: integration of IDEA in collection assessment, accessibility and engagement in public libraries, and the conceptual foundations of IDEA. However, the study also exposes critical gaps, including geographic and cultural imbalances, lack of standardized assessment tools, and limited inclusion of community perspectives. To address these, it advocates for expanded global research, development of scalable evaluation frameworks, and greater use of participatory methods. These recommendations aim to advance more inclusive, equitable, and user-responsive collection development practices across diverse library settings.

11:20-11:45
100663 | *Middle School Libraries as Active Agents of Risk Awareness: Post-Disaster Knowledge Curation and Public Engagement in Thailand*
Kaimuk Laosunthara, Srinakharinwirot University Prasarnmit Demonstration School, Thailand
Ampan Laosunthara, Institute of Science Tokyo, Japan

Following the March 28, 2025, magnitude 7.7 earthquake centered in Myanmar—which triggered long-period ground motion (LPGM) and serious disruption in Bangkok—this study explores how a Thai middle school library responded educationally to the event. It presents a case where the library served as a pilot site for youth-centered disaster learning during and after the 15th Pre-Book Fair (April–July 2025). The library launched a three-part program titled “Survive and Be Safe from Disasters,” focusing on earthquake and tsunami awareness. With support from disaster experts, librarians co-designed hands-on activities such as evacuation drills and tsunami simulations using virtual reality (VR). Students also joined risk mapping using colored Post-it notes to mark safe and hazardous zones inside the library. A key element was storytelling, where students shared personal experiences of the March 28 earthquake. Accounts—from confusion in high-rises to chaotic evacuations—offered insight into how youth perceive and react to disaster risk. Their stories highlighted gaps in disaster education and increased awareness of local vulnerabilities. This paper argues that middle school libraries could serve as decentralized disaster risk reduction (DRR) nodes. By curating local knowledge, enabling experiential learning, and fostering civic dialogue, libraries can become active players in community-based DRR. Rather than passive information holders, school libraries should be integrated into national DRR education strategies. We advocate for recognizing school librarianship within disaster governance and propose a model for embedding libraries into DRR planning through outreach, learning design, and collaboration.

11:45-12:10
97400 | *The Academic Archives as a Site of Power and Trust: A Content Analysis of Their Practices Through the Critical Lens*
Christine Abrigo, De La Salle University, Philippines

This study investigates how the local academic archives embody trust, power, and evidence, particularly in privileging dominant narratives or muting dissenting ones. It explores the central question: What voices on trust, power, and evidence do the academic archives privilege or marginalize? Common themes and patterns represented in their documentation practices were analyzed to find out the prominent voice these documents and practices reveal. Guided by the critical tradition framework and archival theories, the study employed Thematic Content Analysis of nine document types across four data source types, supplemented by key informant interviews to validate findings. The analysis examined documentation practices to identify recurring themes and the dominant voices they reveal. Findings show that academic archives tend to privilege dominant voices in terms of access and use of archival documents and raise their stakeholders’ archival consciousness. Users and stakeholders are not marginalized in terms of accessing the archival documents. Evidence in documents and their users is not muted. The patterns and mapping of theories reveal that academic archives privilege knowledge for and trust in their users as they exercise their authority as a “site of power”. The results of the study inform the archives and library communities of the academic archives’ strengthening influence in shaping their stakeholders’ consciousness about their institutions. While studies of this nature are more common in community archives, this work fills a gap in local academic archival research and suggests the need for further inquiry into the power dynamics embedded in academic archival practice.

10:55-12:10 | Room 705 (7F)

Thursday Onsite Parallel Session 2

ACE2025 | Gender Issues in Education

Session Chair: Nahum Welang

10:55-11:20

97104 | *Mobile Pocket Guide App with Chatbot for Addressing Gender-Based Violence: Strengthening Case Referral Mechanisms Towards Promoting Safe Spaces in Schools*

Leomar Miano, Southern Luzon State University, Philippines
Marissa Esperal, Southern Luzon State University, Philippines

This research employed a developmental approach to design a Mobile Pocket Guide Application integrated with a chatbot for gender-based violence (GBV) case referral in the Department of Education (DepEd) Division of Tayabas. A needs assessment was conducted through a survey and a focus group discussion (FGD). The survey, participated in by 436 randomly selected students, evaluated school climate, student experiences with GBV, and awareness of GBV-related issues. Meanwhile, FGDs with six school heads assessed current strategies for addressing and preventing GBV, and explored challenges students face when reporting such incidents. Quantitative data were analyzed using mean and t-tests, while qualitative data underwent thematic content analysis. Findings revealed that although students generally perceived the school environment as respectful, issues such as peer aggression, fear of punishment, and threats hindered incident reporting. Bullying was a persistent concern. While students exhibited growing gender sensitivity, traditional gender biases persisted. Many students lacked understanding of physical, psychological, and sexual abuse as forms of GBV. A statistically significant difference was found between grade levels, with Grade 12 students perceiving a more positive school climate than Grade 11 students. Teachers often believed GBV incidents were absent, contrasting with students' reports of GBV experiences, including those outside school grounds. The integration of a gender and development module had a statistically significant positive effect on students' understanding. Based on these results, the implementation and further testing of the Mobile Pocket Guide App is strongly recommended to evaluate its user acceptability and effectiveness in improving GBV case reporting mechanism.

11:20-11:45

97323 | *Value Alignment Experiments on AI Systems: A Case Study on Gender Issues*

Hui-Wen Liu, National Chengchi University, Taiwan

The development and application of generative AI have fundamentally transformed human learning activities. Whether in terms of learning formats or content, the impact of AI on contemporary students has attracted significant attention. This study argues that beyond acquiring knowledge, the impact of Gen AI is also on the transmission of social values. As such, discussions surrounding value alignment in AI systems have emerged as a critical topic. In this study, 85 gender-related questions were designed and posed to four different AI systems. The goal was to identify the value orientations of these AI systems. Preliminary results show that while some AI systems emphasize gender equality in their responses, they still reproduce traditional gender roles and occupational stereotypes. Other systems, however, support more inclusive perspectives on gender, highlighting the freedom of gender expression and even generating content that reflects cross-cultural understanding of gender issues. Through this, the study provides insight into the degree of value alignment on gender issues across four widely used AI systems.

11:45-12:10

94929 | *No Country for Young Men? Developing a Humanities Pedagogy to Address the Crisis of Modern Masculinity*

Nahum Welang, Nord University, Norway

A comprehensive UNESCO study revealed that, due to a variety of socio-economic reasons, primary and secondary school boys (PS boys) are becoming alarmingly disengaged from education, resulting in low motivation and high dropout rates. Moreover, many young men admit to feeling disengaged or alienated from a sense of community because "no one really knows me very well" (Equimundo p. 3 2023). This growing crisis of male disengagement has made PS boys and young men susceptible to the divisive rhetoric emanating from the "manosphere," male-dominated online communities influenced by figures like Andrew Tate, Adin Ross, and Elon Musk who blame women and other marginalized groups for the social alienation of men. Although the severity of this ongoing crisis has impacted countries all over the world, including South Korea, Norway and many others, educational institutions are largely failing to address this issue due to their focus on pedagogies, which either downplay or ignore the severity of male disengagement. In my presentation, I thus attempt to address this knowledge gap by concretely developing literature-based teaching strategies that draw upon dynamic pedagogical practices from the Humanities to help PS boys and young men to challenge harmful masculinity ideals and, in the process, build nurturing social bonds. In other words, my presentation explores compelling alternative narratives to the rhetoric emanating from the manosphophere, alternative narratives that encourage PS boys and young men to explore an inclusive range of diverse masculinities beyond the virtual realm.

10:55-12:10 | Room 707 (7F)
Thursday Onsite Parallel Session 2
ACE2025 | Innovative Technologies in Education
Session Chair: Gembo Tshering

10:55-11:20
98656 | *Investigating the Relationship between Multiple Representations Competence and AR-Based Learning Resource Development Skills among Preservice Chemistry Teachers*
Dina Dina, University of Birmingham, United Kingdom
Rama Oktavian, Brawijaya University, Indonesia
Dylan P Williams, University of Birmingham, United Kingdom

This study introduced a practical mentoring approach for preservice chemistry teachers to enhance multiple representations (MR) competence—macroscopic, symbolic, and submicroscopic—based on chemistry comprehension. This mentoring aims to foster their ability to create Augmented Reality (AR)-based learning media to visualise abstract chemical concepts. A four-week training involving 101 preservice chemistry teachers from the Department of Chemistry Education, Universitas Negeri Yogyakarta, was conducted, integrating instruction on MR with hands-on workshops on creating AR content using Blender, Unity, and Assemblr Edu. A mixed-method design was employed, combining quantitative and qualitative analyses. Quantitative data on MR competence were collected through pre- and post-tests, while qualitative data were gathered using a structured rubric to evaluate participants' initial product designs (PowerPoint visualisations) and their post-training AR products. Both datasets were analysed using the N-Gain scores and the Wilcoxon signed-rank test. The finding revealed that MR competence (N-gain = 0.49, medium) and AR-based learning media development (N-gain = 0.46, medium) showed significant improvements, as confirmed by Wilcoxon tests ($p < 0.001$). Furthermore, a strong positive correlation was identified between participants' understanding of MR and their ability to create AR-based learning resources ($r = 0.740$, $p < 0.001$). These results suggested that integrating MR training with AR-based media development is an effective strategy for preparing preservice chemistry teachers to design innovative learning resources and to promote deeper conceptual understanding in chemistry education. The study also highlighted the skills required to successfully implement AR-based learning media into the chemistry classroom.

11:20-11:45
100931 | *Designing an AI-Integrated Digital Learning Ecosystem to Advance Teacher Competencies and Literacy*
Paritchaya Sarakan, Khon Kaen University, Thailand
Lan Nguyen Thi, Khon Kaen University, Thailand
Parama Kwangmuang, Khon Kaen University, Thailand
Anucha Somabut, Khon Kaen University, Thailand

Artificial intelligence is rapidly permeating teacher professional development, yet many initiatives remain tool-centric and weakly aligned with competency standards and AI literacy. This study addresses that problem by designing and validating an AI-integrated digital learning ecosystem to advance teacher performance competencies and AI literacy within a coherent, adaptable model. Using a design-and-development research approach, Phase 1 comprised (a) multi-theoretical synthesis spanning learning sciences, pedagogy, media and technology, institutional context, ecosystem design, performance competencies, and AI literacy; (b) translation into an operational design framework; (c) specification of a configurable ecosystem with four core components—Learning Design and Pedagogy, Technology Infrastructure and Tools, Stakeholder Roles and Collaboration, and Strategic and Policy Foundations—and ten selectable sub-components; and (d) structured expert validation. Three expert panels (n = 45) assessed relevance, coherence, feasibility, innovation, and scalability using standard content-validity procedures and inter-rater reliability statistics. The model demonstrated strong validity: scale-level indices of 0.88–0.91, item-level indices predominantly ≥ 0.87, Fleiss' kappa of 0.84, Krippendorff's alpha of 0.82, and consensus rising to 93% after refinement. Novel contributions include a seven-base theoretical integration that positions AI as cognitive and collaborative augmentation, a personalization and scaffolding mechanism linking analytics to authentic performance, and implementation guidance that connects ecosystem design to institutional policy and evaluation. The findings establish a theoretically grounded, implementation-ready architecture for responsible AI adoption in teacher learning. Implications include practical pathways for phased deployment, alignment with performance agreements, and a research agenda for field trials, longitudinal impact, and cross-cultural validation.

11:45-12:10
97649 | *Aligning Education Data Systems for Quality Improvement in Bhutan*
Gembo Tshering, Royal University of Bhutan, Bhutan

Bhutan's education system has made significant progress in enrollment and infrastructure; however, maintaining education quality remains a major challenge. To support this effort, Bhutan introduced two technology platforms: the Education Management and Information System (EMIS) and the Motherboard. EMIS provides quantitative data for administration and management, while the Motherboard focuses on qualitative data to assess student performance. Despite their potential, EMIS faces issues related to data quality, system design, and integration into decision-making. Meanwhile, the Motherboard operates independently and requires substantial manual effort. This study employed action research and a cross-sectional survey involving 299 schools, 20 district education officers, and three government agencies to identify gaps between the systems' intended and actual functions and to find opportunities for technological and systemic innovation. Results highlight the need for better system design (data architecture, coverage, analytics, flexibility, serviceability), improved data quality (methodological soundness, accuracy, integrity, timeliness), an enabling environment (legal framework, organizational structure, processes, capacity, resources, data-driven culture), and increased use of data in decision-making (openness, accessibility, operational use, dissemination). The study also stresses the need to reduce the Motherboard's labor intensity. Based on these findings, it recommends short-term measures to improve data validity and reliability, along with long-term strategies like international benchmarking to align and strengthen systems in their design, data quality, enabling environment, and data use. These strategies offer a scalable roadmap for innovating, integrating, and improving education data systems in Bhutan and similar countries through technology-driven solutions aimed at boosting learning outcomes.

10:55-12:10 | Room 708 (7F)
Thursday Onsite Parallel Session 2
ACE2025 | Educational Policy, Leadership, Management and Administration
Session Chair: Ian Teo

10:55-11:20
98385 | *Instructional Supervisory Practices in a Philippine Higher Education: Performance Evaluation Cycle*
Mark Irvin Celis, Lyceum of the Philippines University, Philippines
Annie Abonita, Lyceum of the Philippines University, Philippines
Kimberly Joy Alcaraz, Lyceum of the Philippines University, Philippines

This study investigates the instructional supervisory practices of program chairs and coordinators at Lyceum of the Philippines University (LPU), aiming to develop a performance evaluation cycle aligned with the University's Educational Policy and responsive to the unique needs of its academic community. Using a descriptive research design, data were gathered through a researcher-made questionnaire, validated by six education experts and subjected to reliability testing. The instrument assessed supervisory practices across four dimensions: Classroom Visitation, Coaching and Mentoring, Planning, and Monitoring and Evaluation, alongside hindering and facilitating factors. A total of 40 respondents were selected through purposive sampling, ensuring representation across departments and specialization areas. Statistical analysis included weighted mean computations to determine the frequency of practice and agreement levels. Findings revealed that Planning was the most consistently practiced supervisory function (WM = 4.52), followed by Monitoring and Evaluation (WM = 4.50), Coaching and Mentoring (WM = 4.33), and Classroom Visitation (WM = 4.28). Hindering factors such as schedule conflicts, lack of resources, and faculty resistance were rated as slightly agreed upon, indicating moderate impact. Facilitating factors like clear communication, collaborative planning, and trust-based mentoring relationships were generally agreed upon, supporting effective supervision. Grounded in the principles of instructional leadership and adult learning theory, the study culminated in the development of a four-stage Performance Evaluation Cycle tailored to LPU's context. While findings may have limited generalizability to other HEIs, the proposed model offers a structured, data-informed approach to enhancing instructional supervision within the university setting.

11:20-11:45
97175 | *Leadership Styles of Academic Heads at La Consolacion University Philippines: Navigating AI Integration*
Enrico Rosales, La Consolacion University Philippines, Philippines
Paul Benedick Mora, La Consolacion University Philippines, Philippines
Jennylou Dela Rosa, La Consolacion University Philippines, Philippines

This study investigated how deans and program heads at La Consolacion University Philippines (LCUP), a Catholic institution, adapt their leadership styles amidst the growing integration of Artificial Intelligence (AI) in higher education. Recognizing AI's transformative impact on pedagogy, administration, and research, the research also examined the incorporation of Augustinian core values into their leadership practices. Using a descriptive-correlational design, the study explored the relationship between observed leadership styles and administrators' perceptions of AI adoption, while upholding LCUP's unique Catholic mission. Data was collected via standardized questionnaires to identify leadership styles and measure AI perceptions among deans and program heads. Analysis involved mean and frequency distributions, and Pearson Correlation, performed using SPSS. Findings revealed Servant Leadership as the most prevalent style, followed by Transformational Leadership, among LCUP's academic leaders. Deans and program heads generally hold positive perceptions of AI adoption, recognizing its potential to enhance teaching, learning, and efficiency. A significant relationship was found between prevalent leadership styles and administrators' perceptions of AI adoption. The study recommends further qualitative research to explore challenges and opportunities related to AI adoption and leadership styles among school administrators.

11:45-12:10
93562 | *Enhancing Educational Standards Through International Large-Scale Assessments: Case-Studies from Ecuador and Tajikistan*
Ian Teo, Australian Council for Educational Research, Australia

The Programme for International Student Assessment (PISA) provides education systems with the opportunity to benchmark student learning outcomes against global standards. By focusing on 15-year-olds' abilities in reading, mathematics, and science to address real-world challenges, PISA provides evidence-based data for policy decision-making and can foster systemic improvements in education quality. This presentation will provide a comparative analysis of two countries – Ecuador and Tajikistan – that have opted to participate in PISA for the first time in 2025. In particular, each system's readiness to participate in this international large-scale assessment (LSA) will be discussed, as a result of undertaking a capacity needs assessment (CNA). The CNA methodology involved reviews of education policies, government documents, and the research literature, as well as gathering data from online surveys and in-country interviews with key stakeholders from the public, private, and NGO sectors. Data was analysed and categorised across three dimensions –the enabling environment, organisational capacity, and individual roles– to highlight strengths and gaps across both education systems. The findings from the CNA for Ecuador and Tajikistan will be discussed comparatively, focusing on each system's readiness to undertake an international LSA, like PISA2025. Issues discussed will include securing sustainable funding, building institutional capacities, and fostering stakeholder engagement to maximise the benefits of LSA data. The impact of assessment data on education policy development will also be addressed with respect to system strengthening, informing policy, and enhancing education equity, to help ensure long-term educational improvements and quality.

Notes

13:10-14:50 | Room 601 (6F)
Thursday Onsite Parallel Session 3
ACE2025 | Assessment Theories and Methodologies
Session Chair: Guilherme Temporao

13:10-13:35
97452 | *Investigating Gen-AI Integration in Assessment Redesign Among Higher Education Lecturers*
Analisa Hamdan, Asia Pacific University of Technology & Innovation, Malaysia
Abtar Darshan Singh, Asia Pacific University of Technology & Innovation, Malaysia
Aisyamariam Abdul Uzza, University of St Andrews, United Kingdom
Jonathan Kovilpillai, Asia Pacific University of Technology & Innovation, Malaysia
Fumiko Konno, Asia Pacific University of Technology & Innovation, Malaysia
Fahd Ali Raza, Asia Pacific University of Technology & Innovation, Malaysia

Across the world, higher education lecturers face growing pressure to redesign assessments due to students' widespread use of Generative AI (Gen AI) tools like ChatGPT, Copilot, and Gemini. Despite institutional restrictions, students still use Gen AI tools, raising concerns about the authenticity, fairness, and relevance of traditional assessments. Conventional models often fail to foster the higher-order thinking, creativity, and authentic skills needed in AI-integrated learning. This qualitative, exploratory study investigates how lecturers embed Gen AI in assessment redesign. Using Technological Pedagogical Content Knowledge (TPACK) framework, the analysis considers how lecturers balance pedagogy, technology and content when configuring or discouraging AI support. Biggs' Constructive Alignment model assesses task coherence with learning outcomes, while Furze's AI Assessment Scale classifies AI transparency, from no AI to full AI, defined as explicit disclosure and embedding of AI assistance. Semi structured interviews with 20 STEAM lecturers at Malaysian private universities were purposively sampled and thematically analysed in NVivo, identifying four key themes. Findings show that Gen AI scaffolds learner agency, personalises feedback and stimulates higher order cognition, yet lecturers wrestle with tensions between empowerment and academic integrity. Adoption is hindered by inconsistent policies, limited professional development and digital-equity challenges. Discipline specific variations reveal emerging best practices: for example, re-authoring a reflective essay prompt into an AI assisted critique task demonstrates how theory guided redesign, AI classification and outcome alignment. The study recommends revising curricula, training faculty, clarifying AI guidelines, and supporting students to ensure pedagogically sound and ethical assessment in the AI era.

13:35-14:00
97831 | *Evaluating the Impact of Online Formative Assessment on Student Performance and Perceptions: A Quasi-Experimental Study from Saudi Higher Education*
Hayat Alajlan, King Saud University, Saudi Arabia

This quasi-experimental study explores the impact of online formative assessments (OFA), specifically through frequent online quizzes, on learning outcomes and student perceptions in an introductory computer education course at a Saudi Arabian university. The research involved 28 female students, divided equally into an experimental group (weekly online quizzes in addition to standard exams) and a control group (midterm and final exams only). Learning performance was measured using pre- and post-tests, while student perceptions were gathered through a structured questionnaire. Although post-test scores did not significantly differ between groups, the experimental group showed marked improvement from pre- to post-test, suggesting a positive effect of frequent quizzing on learning progression. Furthermore, students in the experimental group reported favorable perceptions of the quizzes, viewing them as helpful tools for reinforcing understanding and preparing for exams. This study contributes to the growing body of research on formative assessment by highlighting how the integration of OFA with self-regulated learning principles can promote learner autonomy and engagement—particularly within underrepresented higher education contexts such as Saudi Arabia. By bringing attention to the pedagogical value of continuous assessment in diverse cultural and institutional settings, the findings invite broader international dialogue on inclusive, context-aware strategies for enhancing student learning. Limitations include the small sample size and single-institution scope. Future research should involve larger, more diverse cohorts and examine the long-term impact of such assessment strategies across different disciplines and learning environments.

14:00-14:25
97239 | *Development and Validation of a Scale Measuring Students' Use of Generative Artificial Intelligence (GAI) Tools*
Alvin Barcelona, Philippine Normal University, Philippines
Sam Rhoy Dela Cruz, Far Eastern University, Philippines

The emergence of artificial intelligence in education, such as students' use of Generative Artificial Intelligence (GAI) tools in academic work, has profoundly transformed the learning ecosystem, offering both promising opportunities and potential challenges. Considering that such tools are still a developing area of study in education, this paper aimed to develop a scale that can assess and describe students' practices and perspectives towards using GAI tools. Through an exploratory-sequential mixed methods design, an interview of 20 higher education students and a scoping literature review were used to generate scale items in the first phase of the study. In the second phase of the study, two pilot tests of the scale participated by 793 students were implemented. Exploratory and confirmatory factor analysis, internal consistency, and convergent validity tests were also carried out. The developed scale consists of 26 statements covering the following factors: (1) research tool, (2) communication tool, (3) reliance, and (4) ethical use. The CFA model confirmed these factors, and all fit indices show that the overall structure of the scale has acceptable to good fit. The scale's psychometric properties reveal that it is valid and reliable. This scale development study implicates schools to use a structured way of assessing how students engage with GAI tools in academic settings and rethink ways to support students' learning through the responsible use of artificial intelligence tools.

13:10-14:50 | Room 601 (6F)

Thursday Onsite Parallel Session 3

ACE2025 | Assessment Theories and Methodologies

Session Chair: Guilherme Temporao

14:25-14:50

96507 | *Curricula in AI Education: The Cost of Prioritizing Tools over Foundations*

Guilherme Temporao, Pontifical Catholic University of Rio de Janeiro, Brazil

This paper offers a critical reflection on the current curricula in undergraduate education in Artificial Intelligence (AI). As new degree programs rapidly emerge around the world, many of them prioritize applied training in software development and AI tool usage, often at the expense of foundational disciplines such as mathematics, physics, and computer architecture. While practical skills are undeniably important, this narrow focus raises serious concerns about the long-term intellectual and ecological responsibility of future AI professionals. The article argues that reducing AI education to tool proficiency risks producing technically capable graduates who lack the conceptual understanding necessary to engage critically with the technologies they employ. Without exposure to the mathematical structures behind machine learning algorithms—or to the physical constraints and environmental costs of the hardware they depend on—students are left unequipped to assess the broader implications of AI systems in society. Drawing on curriculum analyses and recent educational initiatives, this paper explores the gaps between current program designs and the deeper competencies required for a sustainable and ethically grounded AI practice. It calls for a rebalancing of AI education: one that integrates scientific literacy, systems thinking, and philosophical reflection into the core of technical training. This paper advocates for reintegration of foundational knowledge into AI curricula—emphasizing not only algorithmic literacy, but also awareness of the physical, energetic, and ethical dimensions of computation. Educating future professionals in AI must go beyond short-term employability; it must prepare them to question, contextualize, and co-shape the evolving role of intelligent technologies.

13:10-14:50 | Room 603 (6F)
Thursday Onsite Parallel Session 3
ACE2025 | Higher Education
Session Chair: Tony Nguyen

13:10-13:35
93752 | *Performance Trend Analysis of Modules At-risk: A Case Study of a University of Technology in South Africa*
Phiwayinkosi R Gumede, Mangosuthu University of Technology, South Africa
Halalisile Hlobile Xulu, Mangosuthu University of Technology, South Africa
Mashango Phillemon Sithole, Limpopo University, South Africa

The persistent challenge of high failure rates in specific academic modules, known as modules at-risk, poses significant barriers to student progression and graduation rates in higher education. This issue is particularly pronounced in South African universities, where throughput and retention rates remain critically low. Accordingly, this study investigates the performance trends of modules at-risk at a South African University of Technology (UoT) over a three-year period (2018–2020), with a focus on identifying consistently underperforming modules and their possible contributing factors. Adopting a quantitative research design buttressed by a positivist paradigm, the study utilised historical performance data retrieved from institutional databases. Microsoft Excel statistical tool was used to identify and analyse modules with pass rates consistently below 50%, to explore potential determinants of these outcomes. The analysis revealed notable performance disparities across academic departments and faculties. The findings provide insights for mitigating academic challenges posed by modules at-risk on modules that appear in three consecutive years. Based on the findings, evidence-based recommendations are proposed. This research contributes to the broader discourse on optimising academic programmes and addressing systemic barriers to student success in higher education.

13:35-14:00
95749 | *Investigating the Learning Adaptation of Medical Students in Clinical Clerkship*
Yun-Ting Huang, National Cheng Kung University, Taiwan

The transition to clerkship education represents a pivotal phase during which medical students first assume the role of doctors. This stage is crucial for their development into professionals who think and act in accordance with the values of clinical practice. During this period, students move from the structured environment of pre-clinical education into hospital settings characterized by apprenticeship and experiential learning. They are expected to manage a diverse range of responsibilities that differ significantly from prior academic experiences, including communicating with patients and families, collaborating with healthcare professionals, and engaging in self-directed learning and management. The transition to clerkship is widely recognized as a challenging period for medical students, as they encounter stressful and demanding tasks inherent in undergraduate medical training. Many students report concerns that their limited clinical knowledge and skills may negatively impact patient care. Despite the significance of this transition, limited research has focused on how medical students adapt to learning in the clinical clerkship phase. This study aims to explore medical students' learning adaptation during clinical clerkship. Data were collected from medical students currently engaged in clinical clerkship. The findings revealed that students scored highest in the adaptation dimension and lowest in the skills dimension. Furthermore, the integrated basic and clinical curriculum was found to positively influence students' knowledge, skills, attitudes, and adaptability during clinical training. These findings offer important insights for enhancing medical education and inform recommendations for educational practice and future research.

14:00-14:25
100671 | *Can a 4-Week Long Positive Psychology Intervention (PPI) Bring About Psychological Benefits in College Students?*
Garima Rajan, FLAME University, India
Mehar Sandhu, FLAME University, India

Academic stress, coupled with the challenges of the modern educational system, has created a need for comprehensive interventions to address the mental health of college students and enhance their positive functioning (Reddy, 2023; Singh & Bandyopadhyay, 2021). This study aimed to determine whether a 4-week mindfulness meditation, guided imagery, and gratitude journaling intervention would be effective in improving college students' mental health. 21 participants in the control group and 25 participants in the experimental group completed the study from an Indian University. Participants were assessed on gratitude, resilience, mindfulness, stress, anxiety, and depression, and well-being indicators consisting of peace of mind, harmony in life, and multidimensional flourishing, before and after the intervention. A mixed-design ANOVA was conducted to analyze the effects of time (pre-post), group, and the interaction between time and group on all study variables. Post-hoc analyses for group differences were conducted using the Bonferroni post-hoc test. Participants in the experimental group experienced significant improvements in peace of mind ($p=0.02$), flourishing ($p=0.03$), and emotional well-being ($p=0.03$), along with reductions in anxiety ($p=0.04$) and depression ($p=0.04$) levels, while the control group experienced no significant changes. The findings from the study offer valuable insights into the implications and complexities of combined mindfulness meditation, guided imagery, and gratitude journaling interventions, underscoring the need for further investigation into tailored, holistic, and sustainable approaches to support the mental well-being of college students.

14:25-14:50
97073 | *From Classroom to Startup: How Entrepreneurship Education Shapes University Students' Entrepreneurial Intentions Through Entrepreneurial Alertness and Passion*
Tony Nguyen, RMIT University Vietnam, Vietnam
Giang Hoang, RMIT University Vietnam, Vietnam

Entrepreneurship education has garnered significant attention from scholars and policymakers due to its critical role in fostering students' entrepreneurial aspirations and competencies. Despite this interest, empirical evidence regarding its effectiveness in shaping entrepreneurial intentions remains limited. This study draws on social cognitive theory to propose a research model in which entrepreneurship education enhances entrepreneurial intentions through two key constructs: entrepreneurial alertness and entrepreneurial passion. Entrepreneurial alertness refers to an individual's ability to identify and act on business opportunities, while entrepreneurial passion encompasses the intense emotional drive that motivates individuals to pursue entrepreneurial activities. By examining these relationships, our research aims to provide a nuanced understanding of the mechanisms through which entrepreneurship education impacts students. Data were collected through a survey of 721 undergraduate business students across nine universities in Vietnam, and structural equation modeling was employed to test the proposed hypotheses. Our findings reveal a significant positive relationship between entrepreneurship education and entrepreneurial intentions, with both entrepreneurial passion and alertness serving as mediators. The findings of this study contribute to the literature on entrepreneurship education by highlighting the importance of these constructs in influencing entrepreneurial intentions. Additionally, it offers practical implications for universities and policymakers, emphasizing the need to enhance access to entrepreneurship education programs that foster not only knowledge but also the emotional and cognitive skills necessary for entrepreneurial success.

13:10-14:50 | Room 604 (6F)
Thursday Onsite Parallel Session 3
ACE2025 | Social Studies and Citizenship Education
Session Chair: Fabian Heindl

13:10-13:35
98543 | *Cultivating Students' Interest and Agency in Learning Social Studies: Knowledge Building and Concrete-Pictorial-Abstract Model*
Jiehui Lin, Damai Secondary School, Singapore
Melvin Chan, Chua Chu Kang Secondary School, Singapore
Gaoxia Zhu, Nanyang Technological University, Singapore

The Singapore Social Studies curriculum often presents abstract and complex concepts, making it challenging to arouse and maintain students' interest, let alone exercise their sense of agency in learning. To address the challenges, this study integrates the Knowledge Building (KB) approach and the Concrete-Pictorial-Abstract (CPA) model, along with diverse technology-supported learning experiences at rotating stations. Findings indicate that this integrative approach enhanced students' interest in the subject, becoming active participants as they explored complex concepts through the various stations. Furthermore, the CPA model enhanced students' understanding by guiding them from concrete to a deeper comprehension of abstract concepts using concrete and visual representations. This comprehension, in turn, cultivated greater student agency, as students actively contributed their learning reflections and ideas, leading to a collaborative contribution of diverse ideas. Further consideration could build-on from this approach in helping students deepen their knowledge of the abstract concepts based on their initial contributions.

13:35-14:00
96442 | *Social Studies Learning with Reflective Inquiry Approach as a Means of Improving Cultural Literacy*
Eka Yuliana Rahman, Universitas Pendidikan Indonesia, Indonesia
Nana Supriatna, Universitas Pendidikan Indonesia, Indonesia
Juju Masunah, Universitas Pendidikan Indonesia, Indonesia
Erlina Wiyanarti, Universitas Pendidikan Indonesia, Indonesia

Cultural literacy has become a critical component of Social Studies education in today's globalized era. This study aims to explore the effectiveness of reflective and inquiry-based approaches in enhancing students' cultural literacy through a systematic literature review. The methodology follows the framework proposed by Cohen, Manion, and Morrison (2018). Relevant literature was collected from indexed academic databases such as Scopus, ERIC, and Google Scholar, covering the period from 2013 to 2023. Selection criteria included topical relevance, methodological rigor, and alignment with Social Studies learning contexts. Thematic coding was conducted using NVivo software to identify patterns in the implementation of reflective and inquiry-based practices in cultural and social education. Findings indicate that reflective approaches enable students to connect cultural insights with their personal and social experiences, while inquiry-based learning fosters independent exploration of cultural phenomena through questioning, investigation, and synthesis. This form of literacy encompasses not only cultural knowledge but also critical thinking, evaluative skills, and a deeper appreciation for cultural diversity. The study recommends practical strategies such as structured reflective discussions, case study analysis of local cultures, and community-based inquiry projects. These recommendations are particularly relevant for Social Studies educators and policymakers seeking to transform cultural literacy from a purely cognitive understanding into a character-building process. Ultimately, the findings reinforce the importance of strengthening cultural identity while fostering meaningful intercultural dialogue within Social Studies curricula.

14:00-14:25
97220 | *Analyzing Historical Sources with ChatGPT: A Pedagogical Case-Study in Using AI in Readings in Philippine History*
John Edward Alfonso, National University, Philippines

In recent years, artificial intelligence (AI) has become increasingly integrated into society, especially in the field of education. From students using Meta AI to assist with coursework to educators consulting ChatGPT for instructional materials, AI has undeniably entered the academic sphere. Rather than viewing this as a threat to traditional learning, it presents an opportunity to enhance the educational process. One area where AI's potential can be explored is in the tertiary-level course Readings in Philippine History, which emphasizes the evaluation and analysis of primary sources that shape the nation's historical narrative. With the growing accessibility of AI tools, using these platforms to interpret historical documents may seem appealing and more efficient. However, this raises a crucial pedagogical question: Can AI-assisted analysis meet the course's objectives, particularly in developing critical thinking and source evaluation skills? This study investigates the role of AI in evaluating and analyzing historical sources in Philippine history. It examines the accuracy, depth, and educational value of AI-generated insights through the AI-assisted analysis of Antonio Pigafetta's account of Magellan's voyage. Results show that even upon uploading a copy of the document and guide questions, the analysis made by AI contains missing and sometimes inaccurate information. This highlights the continued importance of user intervention and critical thinking in producing a meaningful output. The study explores the broader possibilities and limitations of AI-assisted learning and underscores the evolving responsibilities of both instructors and students in this emerging educational landscape.

14:25-14:50
97440 | *Rethinking Democratic Citizenship Education: Ambiguity Tolerance as a Neglected Future Competence*
Markus Gloe, Ludwig-Maximilian-University, Germany
Fabian Heindl, Ludwig-Maximilian-University, Germany

In times of increasing social and political uncertainty, the ability to endure and productively engage with ambiguity is gaining relevance. However, ambiguity tolerance remains a marginal concept in democratic citizenship education up until now. Our contribution addresses this gap and argues that ambiguity tolerance should be given greater consideration as a foundational competence in confronting societal challenges and shaping future-oriented education. Given that the competencies of teachers precede and influence the development of competencies of students, the first step of our contribution involves the presentation of empirical data collected on the ambiguity tolerance of student teachers — both with and without a specialized focus on democratic citizenship education. The findings provide insight into the current levels of ambiguity tolerance among future educators and suggest possible implications for improvement in educational learning processes. Against the backdrop of pressing societal challenges — ranging from overlapping crisis phenomena and the spread of disinformation to public debates on resilience and future viability — the presentation explores the conceptual implications for democratic citizenship education. How might a stronger focus on ambiguity tolerance contribute to the promotion of civic maturity, critical thinking, and political agency and how can this competence be actively fostered? The presentation concludes with a discussion of how ambiguity tolerance can be more systematically embedded as an educational goal. In doing so, it also highlights intersections with other education approaches, thereby situating ambiguity tolerance within a broader discourse on democratic competencies for the 21st century.

13:10-14:50 | Room 605 (6F)
Thursday Onsite Parallel Session 3
ACE2025 | Language Learning and Multilingual Education
Session Chair: Rosianne Arseneau

13:10-13:35
97554 | *In Their Own Words: Thematic, Motivational, and Predictive Insights from Culturally-Diverse Student Writing*
Nicklaus Lewis, Durham Technical Community College, United States
Jetta Lewis, North Carolina State Univeristy, United States
Erianna Littleton, North Carolina Central Univeristy, United States
Mizuho Tatebayashi, North Carolina State University, United States
LaDelta Williams, Durham Technical Community College, United States
Desiree' Heard, North Carolina Central University, United States

This study investigates whether motivational and culturally reflective writing assignments can predict academic success in a community college context. Grounded in self-regulation and motivation frameworks, this mixed-methods project integrates thematic content analysis with regression modeling to assess whether themes such as resilience, goal orientation, cultural influence, familial experience, and socio-economic mobility, alongside emergent themes, can predict outcomes including attendance, assignment completion, and final grades. Student-authored responses to an open-ended assignment in a first-year college success course (ACA 122) are being analyzed using human-coded qualitative methods (via Dedoose) and AI-assisted coding (via ChatGPT), with interrater reliability currently under evaluation. Preliminary analyses (n = 17) using AI-assisted coding found significant positive correlations between course grades and Academic Self-Concept ($r = .45$, $p = .036$) and the emergent theme of Loss, Transition, and Resilience ($r = .48$, $p = .026$). These associations suggest that motivational themes expressed in student writing may be meaningfully related to academic performance outcomes. We will examine these relationships further in the full dataset ($n \approx 300$). These preliminary findings appear to support (a) the viability of mixed-methods approaches in identifying predictors of academic success, (b) the role of AI in qualitative and predictive analyses, and (c) the value of student-authored writing to pedagogical interventions and learning analytics. In essence, this study seeks to embrace distinctive student narratives for insights on how to improve student-learning outcomes. The presentation will detail the study's design, analytic approach, and implications for instructional design, academic support models, and applied educational psychology.

13:35-14:00
98242 | *Building Better Arguments: A CER-based Approach to Persuasive Essays*
Alma Valendez, Cebu Technological University, Philippines
Relyn Rojo, Academia de San Isidro Labrador, Philippines

Developing writing skills among learners is crucial to becoming an effective communicator who can demonstrate depth of knowledge and exhibit critical thinking abilities. Determining ways to improve such skills is essential because effective written communication is one of the foundational skills for academic success and active participation in a functionally literate society. Employing the quasi-experimental design method, the study utilized the Claim-Evidence-Reasoning (CER) Framework to enhance the writing skills of the 10th Graders in Cebu City, Philippines. Two different discussion materials assessing the same writing competencies were used to determine the learners' competencies before and after the intervention scheme. Similarly, the data gathered was analyzed using the paired sample t-test to determine the effectiveness of the CER framework. The findings revealed a significant improvement in the learners' writing competencies in terms of formulating arguments, creating and determining main points, finding supporting evidence for the points made, and creating conclusions using the CER Framework as the intervention. Moreover, the process of the CER framework has helped the learners organize their thoughts and ideas, resulting in coherent and logical persuasive essays. Finally, the CER framework writing process can easily be integrated into daily writing activities across learning areas for deeper understanding, enhanced communication skills, and the development of critical thinking among learners across levels.

14:00-14:25
97134 | *Exploring Informal Chinese Language Learning Among Singaporean Secondary School Students*
Li Li, Singapore Centre for Chinese Language, Nanyang Technological University, Singapore
Tan Geok Hoon, Academy of Singapore Teachers, Singapore
Su Yan Xin, Academy of Singapore Teachers, Singapore
Li Jing, Singapore Centre for Chinese Language, Nanyang Technological University, Singapore
Xu Ming, Singapore Centre for Chinese Language, Nanyang Technological University, Singapore

This study investigates informal Chinese language (CL) learning among secondary school students in a multilingual society where Chinese is the second common language at home. While formal instruction has been well studied, little is known about Singaporean teenagers' opportunities to engage with Chinese outside school hours. Using a qualitative case study approach, semi-structured interviews were conducted with typical secondary school Chinese students to understand their informal CL learning experiences. Activity Theory is employed to analyze how subjects (students), tools (activities, media), community (family, school), and rules (institutional frameworks) interact to shape informal CL learning practices. The analysis shows that institutional structures dominate the learning environment, limiting students' autonomous engagement with CL. Specifically, students have limited self-initiated use of Chinese beyond school. Their engagement is mainly through institutionally recommended enrichment activities organized by the Ministry of Education or Chinese community groups. At home, students use Chinese functionally with family members but rarely explore the language independently. Social cues, rather than personal motivation, typically prompt Chinese use. These findings suggest the need to foster learning ecologies that encourage more student-initiated, autonomous Chinese use beyond formal settings, leveraging peer interactions and digital media to expand informal learning opportunities.

13:10-14:50 | Room 605 (6F)

Thursday Onsite Parallel Session 3

ACE2025 | Language Learning and Multilingual Education

Session Chair: Rosianne Arseneau

14:25-14:50

101460 | *Revision Strategies and Attitudes in Hand vs Digital Writing: Descriptive Study Among French L1 Students in Quebec, Canada*

Rosianne Arseneau, Université du Québec à Montréal, Canada
Marie-Hélène Giguère, Université du Québec à Montréal, Canada
Marion Deslandes Martineau, Université du Québec à Montréal, Canada

From a cognitive perspective, revision is a demanding activity requiring writers to mobilize various strategies (Roussey & Piolat, 2008). In light of recent meta-analyses, strategy instruction emerges as the intervention with the strongest positive effect on text quality (e.g., Koster et al., 2015; Graham et al., 2023). These strategies are crucial for addressing common French linguistic errors in grammatical spelling, syntax, and punctuation (Riegel et al., 2016). Some evidence also suggests that effective revision strategies can positively impact students' attitudes toward revision (e.g.,Van Reybroeck et al., 2017; Teng & Huang, 2019). Computer word processors may reduce cognitive load and enhance attitudes through features like spellcheckers (Brunel & Taous, 2018). However, to our knowledge, no study has investigated the links between grammatical revision strategies and attitudes among French L1 students, specifically comparing handwritten and digital supports. Supported by the Social Sciences and Humanities Research Council of Canada (2023-2025), this descriptive study surveyed 308 students in grades 7-11 using an online questionnaire to document their revision strategies and attitudes. Additionally, 40 semi-structured interviews were conducted to compare revision behaviors with both handwritten and digital supports. The presentation presents the results of tests (Anova and Khi2) conducted on the frequency and efficiency of 7 types of revision strategies for solving spelling, syntax and punctuation problems in handwritten and digital context. Correlations explore the interaction between high efficiency strategies and positive attitudes regarding revision. The findings will be discussed in relation to pedagogical implications for grammar instruction and future research avenues.

13:10-14:50 | Room 607 (6F)
Thursday Onsite Parallel Session 3
ACE2025 | Innovative Technologies in Education
Session Chair: Masrina Nadia Binti Mohd Salleh

13:10-13:35
98252 | *Virtual Newsroom, Real Learning: Investigating Students' Learning Experiences in a Virtual Reality Journalism Course*
Somphop Sukjaitham, Leibniz Institute for Research and Information in Education, Germany
Meng Wei, Yunnan Normal University, China

The integration of virtual reality technologies and artificial intelligence into journalism education—driven by advancements in immersive media—offers powerful instructional approaches, especially when reinforced by well-designed curricula. However, like a double-edged sword, technological innovations can either enhance or hinder students' learning experiences, processes, and ultimately their performance. Accordingly, gaining a deeper understanding of students' experiences is essential for developing pedagogical strategies that more effectively address their needs in technology-enhanced learning environments. This study investigates how self-regulated learning, technology acceptance, and AI literacy relate to students' performance in a VR journalism course. It examines associations among these factors and explores how both students and the instructor describe the learning process in connection to them. Conducted with 61 third-year students majoring in journalism at a Chinese university, this preregistered study employs a mixed-methods design with methodological triangulation, utilizing multiple forms of data to address the same set of research questions. Quantitative data were collected through validated instruments, including the Motivated Strategies for Learning Questionnaire (MSLQ), a Technology Acceptance Questionnaire, and an AI Literacy Scale. Qualitative data were gathered through students' self-reflections and the instructor's observation report, both aligned with the three focal constructs. Students' performance on the final project served as the measure of learning outcome. The research findings are expected to shed light on how students' individual characteristics shape their engagement and performance in technology-enhanced journalism classrooms and to inform the design and development of future curricula and technological support tools that are personalized to students' learning needs.

13:35-14:00
97665 | *Using Social Network Analysis to Investigate Interactions Within Hybrid Learning Environments*
Pei Jun See, University of Otago, New Zealand
Ben Daniel, University of Northern British Columbia, Canada
Joyce Koh, University of Waikato, New Zealand

Hybrid Learning, where both in-person and remote students participate in learning activities synchronously, is a learning modality that has gained traction in tertiary institutions in recent years. However, teaching students located different environments can be a complex endeavour. Educators surfaces multiple challenges in maintaining parity especially when their attention is drawn to in-person students and often neglecting remote students. The quality and quantity of interactions in the learning space is known to be a predictor of students' satisfaction and their experiences within hybrid learning environments (HLEs). The aim of this case study was to investigate the nature of interactions within a series of hybrid workshops conducted for undergraduate students in a research-intensive univeristy. Using social network analysis, this study adopted a quantitative approach to investigate the type of interactions within HLEs and surface any interaction patterns. Teacher-student interactions and student-student interactions in a series of hybrid workshops were analysed to surface interaction patterns. The study found three broad interaction patterns within HLEs and highlights the critical role that teachers' play in facilitating interactions within HLEs. Teachers act as the main conduit between in-person and remote students. Results from this study contributes to knowledge in enhancing learning experiences within higher education and suggests strategies that teacher could adopt to promote quality interactions in HLEs.

14:00-14:25
96495 | *A Community Approach: School-Wide Station Rotation Pedagogy*
Haig Gene Yeo, St Andrew's Secondary School, Singapore
Marek Otreba, St Andrew's Secondary School, Singapore
Chew Ee, St Andrew's Secondary School, Singapore
Irene Loi, St Andrew's Secondary School, Singapore

Our school observed that many teachers faced challenges in applying e-Pedagogy (e-Ped) effectively. Developing digital competencies and encouraging collaborative lesson design became a key priority. However, teachers often lacked clarity on how to design meaningful e-Ped lessons and tended to work in isolation. Traditional teacher-led classrooms also limited differentiation, despite students' diverse learning needs and preferences. To address these gaps, a structured pedagogical model integrating differentiation, active learning, and meaningful technology use was introduced. This solution builds on a successful pilot of the Station Rotation (SR) pedagogy conducted by a Lead Teacher from 2021–2022. In these humanities classes, structured, student-centered rotation activities led to improved student engagement and learning outcomes. Following these results, SR was scaled up as a whole-school approach. To assess the effectiveness of the model, both qualitative and quantitative feedback surveys were conducted with students who experienced SR lessons and approximately 75% of the teachers who implemented them. These were administered after the first year of implementation and indicated positive responses regarding engagement, clarity, and lesson design. The feedback informed refinements to the model in its second year. Additional data will be collected at the end of the current cycle to further evaluate long-term impact. The SR model empowers teachers to blend e-Pedagogy with personalised instruction and collaboration. It offers a flexible framework for lesson design, enabling varied, engaging activities tailored to learner needs. This approach fosters professional growth, enhances collaboration, and improves students' learning experiences through purposeful use of technology.

14:25-14:50
95604 | *FinTech-Driven Educational Innovation: Transforming Digital Economies and Entrepreneurial Ecosystems in Asia*
Masrina Nadia Mohd. Salleh, National University of Malaysia, Malaysia
Rahayu Tasnim, Malaysia University of Technology, Malaysia

FinTech-based entrepreneurs (FEEs) are emerging as pivotal agents of educational transformation across Asia, leveraging financial technologies to enhance digital economic literacy and financial inclusion. This study employs Interpretative Phenomenological Analysis to explore the lived experiences of FEEs who integrate innovative financial tools with educational initiatives. Through in-depth interviews, the research identifies core themes: entrepreneurial motivation, risk-taking, and self-efficacy. Concrete examples include platforms like EduFi, which partners with schools to offer affordable tuition financing, and gamified digital modules that develop financial skills among underserved youth. These cases illustrate how FEEs address barriers to access and affordability, enabling schools to expand their capacity and allowing students to pursue education that was previously out of reach. However, persistent challenges such as regulatory hurdles, digital divides, and the need for ongoing teacher training limit the scalability and equity of these innovations. The findings indicate that FinTech-Innovative Behavior (FIB) is not merely reactive but represents a visionary, value-driven process shaped by individual agency and pedagogical goals. By providing a balanced perspective on both the transformative potential and limitations of FinTech in education, this research offers actionable insights for policymakers, educators, and EdTech developers committed to fostering inclusive, sustainable educational ecosystems in Asia.

13:10-14:50 | Room 608 (6F)
Thursday Onsite Parallel Session 3
ACE2025 | Education Research and Development in Higher Education
Session Chair: Abegail Gonzales

13:10-13:35
93211 | *Determinants of Quality of Life Science Research Among Senior High School STEM Students in the Philippines: A Mixed-Methods Study*
Christian Santiago, Aurora State College of Technology, Philippines

Research drives innovation and development, impacting society. In the Philippines, foundational research knowledge begins at the upper secondary level. However, there is a significant gap in the investigation into factors influencing the quality of STEM research in this context. Thus, this study investigated student, teacher, and institutional influences that affect the quality of research in the primary years This study utilized a concurrent mixed-method design engaging seventeen secondary schools. Data were collected using adapted and researcher-made instruments from a stratified sample of 1,251 students, 84 teachers, 36 administrators, and 210 life science research papers. Descriptive analysis revealed papers of competent quality that are primarily environmental and biomedical research. Further analysis revealed that papers presented and discussed results using science concepts most competently, followed by proper use of standardized procedures in experimental research. Stepwise regression showed that students' foundational English and Science knowledge, biological sex, scientific research skills, self-regulation, research exposure, motivation, and interest, accompanied by teacher's mentorship effectiveness, research experience alongside institutional curricular arrangement, research culture, and research policy, as predictors of quality. Thematic analysis revealed that students' scientific inquiry, critical thinking, and academic writing skills, accompanied by the teacher's support, guidance, well-crafted scientific experimentation activities, and institutional sustainability, recognition, and awards, affect quality. In conclusion, quality of life science research is a combination of student competencies honed by teachers' mentorship, institutional support, and strong research culture. The study suggests investigating factors outside the school, such as parental support and guidance, physical environment, and access to resources at home

13:35-14:00
96885 | *Visualizing the Research Landscape of Philippine LIS: A Bibliometric Mapping Analysis*
Efren Torres Jr, De La Salle University, Philippines
Janice Peñaflor, De La Salle University, Philippines
Jojie Gonda, De La Salle University, Philippines

The study aims to visualize the knowledge structure and research trends of Library and Information Science (LIS) scholarship in the Philippines from 1995 to 2025. It addresses research productivity and impact, collaboration patterns, thematic concentrations, and the evolution of research focus over time. A bibliometric mapping analysis was conducted using data retrieved from Scopus. The study applied performance analysis, co-authorship and co-citation analysis, and keyword co-occurrence analysis. VOSviewer was used to generate visual network maps. The analysis revealed a modest but growing LIS research output in the Philippines, with productivity significantly increasing post-2018. Leading academic institutions were found to play a central role in driving productivity and influence. Collaboration patterns were largely institution-based and fragmented, with limited cross-institutional partnerships. Notable clusters of research were found in areas such as LIS education, academic and public librarianship, digital literacy, and collection development. Over time, research emphasis has shifted from foundational topics to emerging concerns related to digital outreach, research support, and community engagement, indicating growing alignment with evolving societal and technological needs. This is the first longitudinal bibliometric mapping of LIS research in the Philippines. It provides a comprehensive view of the field's development, offering actionable insights for scholars, educators, and policymakers. The study highlights both the strengths and gaps in the existing research landscape, underscoring the need for greater collaboration, inclusivity, and attention to emerging LIS topics.

14:00-14:25
97260 | *Development and Validation of Independent-Flexible Mathematics Learning Scale for Higher Education Students*
Laila Lomibao, University of Science and Technology of Southern Philippines, Philippines
Ranti Timario, Davao Doctors College, Philippines

Flexible learning is the new norm of instruction in higher education. However, no measurement scale is suitable to measure students' readiness to learn mathematics through flexible learning. This study aims to develop a scale and identify the underlying dimensions of independent mathematics flexible learning. The researcher developed 89 questions from focus group discussion, literature review, and theoretical review. The 89 items were utilized in an online survey among five higher education institutions in the Davao region. 1999 students responded. The collected data were analyzed using Exploratory Factor Analysis to identify its underlying dimensions and examine the corresponding items to be included per construct. A three-factor structure scale with 16 items measuring independent mathematics flexible learning was developed.

14:25-14:50
97141 | *LifeLens: A Mobile Augmented Reality Instructional Tool in Central Dogma of Molecular Biology to Enhance Students' Conceptual Understanding*
Abegail Gonzales, Batangas State University, Philippines
Christhel Magbuhos, Batangas State University, Philippines
Wren Evi Ighore Magmanlac, Batangas State University, Philippines
Issa Marie Manalo, Batangas State University, Philippines

Integration of technology has transformed the learning environment into a more engaging and authentic environment (Cheng, 2018; Gan & Balakrishnan, 2018). For the past years, Augmented Reality (AR) established a significant impact on student learning. Thus, this study aimed to develop and evaluate LifeLens: a mobile augmented reality (AR) instructional tool in Central Dogma of Molecular Biology to enhance conceptual understanding of tertiary students of a state university in the Philippines. The said lesson has challenging concepts for students to understand and visualize (Picardal, 2018), thus, it was the intention of the study to design this technology-integrated tool to help students learn better. The ADDIE Model served as guide in the development of Lifelens. Course content experts and educational technologist served as evaluators using validated tool. On the other hand, quasi-experimental research design was used to assess the performance of the students after the implementation using pre-test and post-test. Further, qualitative method thru focus group discussion was also utilized to gather data on learning experiences. LifeLens can be installed on smartphones with Android software ensuring broad accessibility and convenience to use anytime. It features a 3D model of the step-by-step process of DNA transcription and translation. It was evaluated by experts as very satisfactory in terms of content, very easy to navigate, perceived as useful in learning the lesson but found out to be moderately acceptable. Data from pre and post-test revealed significant improvement in students' conceptual understanding. These findings are consistent with the positive feedbacks gathered after its utilization.

13:10-14:50 | Room 703 (7F)

Thursday Onsite Parallel Session 3

ACE2025 | Learning Experiences, Student Learning and Learner Diversity

Session Chair: Mohammad Ahmadi

13:10-13:35
101208 | *Making Group Theory Tangible Through Play*
Mei Ting Ng, National University of Singapore, Singapore
Yong Kang Quek, Woodlands Secondary School, Singapore
Kim Yong Lim, National University of Singapore, Singapore

This paper presents the design and implementation of an interdisciplinary lesson aimed at introducing secondary school students in Singapore to foundational concepts of group theory. The lesson leverages on the familiarity of the 12-hour clock, then Rubik's cube as a visual and interactive learning tool, to bridge abstract mathematical concepts with hands-on experience. In the "Math-gic behind the Cube" lesson, students begin by exploring the fundamental axioms of a group: Closure, Associativity, Identity, and Inverse through modular arithmetic on a clock face. They then apply these axioms to a Rubik's cube by visually and physically mapping its movements to group operations. During the lesson, students pen down their observations and conclusions on a participant worksheet consisting of a series of guiding steps and questions regarding the tinkering process. An exit quiz was designed to assess their understanding of the mathematical concepts taught and a feedback form was administered to evaluate the students' learning experience and perceptions of the lesson. By combining tinkering-based learning with intentional scaffolding, students are guided to connect abstract ideas with hands-on and visual experience. The workshop demonstrates how complex university-level mathematical concepts can be made accessible, engaging, and relevant for younger learners to foster their curiosity.

13:35-14:00
101328 | *Exploring the Predictive Power of Knowledge Building Environments on Collaborative Problem Solving*
Chih Hui Seet, National Chengchi University, Taiwan
Huang-Yao Hong, National Chengchi University, Taiwan
Chih-Hsuan Chang, National Chengchi University, Taiwan
Wen-Lung Huang, Fo Guang University, Taiwan

This study investigates how the Knowledge Building Environment (KBE) predicts Collaborative Problem Solving (CPS) within an Educational Research Methods course. Traditional higher education often emphasizes passive knowledge transmission, limiting opportunities for inquiry, collaboration, and critical thinking. To address this, the course was redesigned using knowledge-building pedagogy, encouraging students to engage in group discussions and inquiry-based tasks. Participants included 59 undergraduates. Data were collected through the Knowledge Building Environment Scale (KBES; α = .94), the Collaborative Problem-Solving (CPS) questionnaire (α = .71–.84), and student postings on the Knowledge Forum (KF) platform. Quantitative data were analyzed using one-sample t-tests, while qualitative analysis examined the depth and focus of online discourse. Results indicated that students' perceptions of KBE significantly predicted CPS outcomes, suggesting a meaningful association between structured learning environments and collaborative competence. Qualitative findings showed that students' discussions evolved from fragmented comments to focused methodological debates, reflecting deeper knowledge internalization. The study provides empirical evidence that knowledge-building pedagogy, by fostering a supportive KBE, can enhance collaborative problem solving. Ultimately, such environments may help students cultivate key 21st-century skills, including creativity, critical thinking, and teamwork.

14:00-14:25
97378 | *Exploring Student Aspirations and Behavioral Insights Towards High-productivity Industries in Malaysia*
Shahlan Surat, National University of Malaysia, Malaysia
Muhammad Syawal Amran, National University of Malaysia, Malaysia
Faridah Mydin Kutty, National University of Malaysia, Malaysia
Shalinawati Ramli, Universiti Sains Islam Malaysia, Malaysia

Malaysia's aspiration to become a high-productivity nation by 2030 hinges on the development of future-ready human capital aligned with high-productivity industries. This study investigates the attitudes, interests, learning preferences, and career inclinations of lower secondary school students towards such industries. Utilizing a cross-sectional explanatory survey design, data were collected from 4,303 Form 3 and Form 4 students across four regions of Peninsular Malaysia through stratified cluster sampling. A validated questionnaire assessed students' motivation, interest, decision-making tendencies, and future aspirations related to high-productivity sectors. Descriptive and inferential analyses revealed that students generally possess a positive attitude (M = 4.12, SD = 0.49) and moderate motivation (M = 3.44, SD = 0.70) toward these industries. The most appealing sectors include food, beverages and retail (57.7%), tourism (44.8%), and life sciences and medical technology (43.5%), with female students showing higher preference in these fields. Notably, students are primarily influenced by themselves, peers, and family members rather than teachers or school counselors when making career decisions. Although certain key industries such as logistics (13.7%) and agriculture (20.8%) exhibit lower interest levels, students express strong aspirations to pursue careers in fields that offer personal growth and financial stability. The findings underscore the importance of early behavioral interventions and tailored educational strategies to cultivate student interest in high-demand sectors. Recommendations include integrating industry-related content into school curricula, enhancing industry-school engagement, and leveraging Behavioral Insights to shape future workforce readiness and align student aspirations with national productivity goals.

13:10-14:50 | Room 703 (7F)

Thursday Onsite Parallel Session 3

ACE2025 | Learning Experiences, Student Learning and Learner Diversity

Session Chair: Mohammad Ahmadi

14:25-14:50

97346 | *The Impact of Peer Interaction on Student Analysis of Argumentation*

Mohammad Ahmadi, Waseda University, Japan

Traditional approaches to rhetorical instruction often treat logos, ēthos, and pathos as distinct and independent categories, limiting students' ability to perceive how these persuasive appeals interact in real-world discourse. This study challenges that compartmentalized framework by examining how Japanese university students interpret rhetorical appeals when working individually versus collaboratively. To investigate this, a two-phase classroom experiment was conducted across six classes at three private institutions in Japan. In Phase 1, students individually classified rhetorically complex statements according to the three persuasive appeals. In Phase 2, students worked in groups to complete the same task. Participants had no prior exposure to rhetorical theory; however, all received pre-instruction that framed pisteis as distinct categories, with no indication that rhetorical overlap was possible before the experiment. Results revealed that students working individually tended to make exclusive, single-category classifications. In contrast, those who engaged in peer discussion more frequently recognized the intersection of persuasive appeals within the same argument. Qualitative observations further indicated that group dialogue fostered interpretive risk-taking, deeper engagement, and critical reflection. These findings suggest that collaborative learning environments support more nuanced rhetorical analysis and help students move beyond rigid taxonomies. The study has practical implications for rhetorical pedagogy, highlighting the value of discussion-based instruction in developing students' critical thinking and communicative competence. By encouraging educators to foreground the dynamic interaction of rhetorical appeals, this research promotes a more holistic and effective approach to teaching argumentation—one that prepares students to engage thoughtfully with persuasive discourse in both academic and real-world contexts.

13:10-14:50 | Room 704 (7F)
Thursday Onsite Parallel Session 3
ACE2025 | Education for STEAM
Session Chair: Rosemary Ugonwa

13:10-13:35
96163 | *Educational Innovation in Science Communication: Enhancing Public Understanding of Environmentally Friendly Nuclear Technology in Indonesia*
Muhammad Yunus Zulkifli, Universitas Indonesia, Indonesia

This study investigates educational innovations in science communication aimed at enhancing public understanding and acceptance of environmentally friendly nuclear technology in Indonesia. As global energy transitions increasingly highlight the importance of low-carbon alternatives, nuclear power has re-emerged as a viable option. However, public skepticism and limited scientific literacy pose significant challenges to its acceptance. This research focuses on how nuclear power plants are represented within educational and public discourse, emphasizing the role of nuclear scientists not only as technical experts but also as educators and communicators. The Indonesian Nuclear Society Association (Himpunan Masyarakat Nuklir Indonesia/HIMNI) is examined as a case study, representing a professional community actively involved in public education and outreach. Through activities such as webinars, workshops, media campaigns, and informal learning events, HIMNI seeks to build trust and foster informed dialogue on nuclear issues. Anchored in a constructivist paradigm and utilizing a qualitative case study approach, data were collected through interviews, observations, and document analysis, applying triangulation to ensure credibility. The findings reveal that the use of innovative communication tools—including interactive digital technologies, infographics, animation, and social media platforms—plays a vital role in enhancing nuclear science literacy and increasing community engagement. Moreover, integrating artistic and visual elements into educational content contributes to making complex nuclear concepts more accessible and relatable. The study concludes by emphasizing the importance of rethinking science communication as a form of public education and calls for interdisciplinary strategies merging scientific content with effective pedagogical and media practices in the context of nuclear energy development.

13:35-14:00
96916 | *Teaching for Tomorrow: Empowering Diverse Learners Through Socio-Scientific Issues*
Sarinajit Kaur, Ministry of Education, Singapore
Tze How Ng, Mayflower Secondary School, Singapore
Anna Koh, Ministry of Education, Singapore

In an increasingly globalised world and with classroom diversity becoming the norm, it necessitates pedagogical strategies that are future-focused. This study explores the use of socio-scientific issues in the teaching and learning of Biology as a means to engage diverse learners while fostering 21st Century Competencies (21CC). These include critical thinking and adaptive thinking through collaborative problem-solving in an inclusive classroom. This session presents learning gleaned from lesson observations and post-observation colloquium in two mainstream secondary schools in Singapore, focusing on how teachers engage student voice through perspective taking. Participants will gain insights into how teachers leverage the interconnectedness of biological phenomena with social, ethical, and economic dimensions and facilitate discussions within the context of diverse classrooms to encourage the transference of learning to real-world issues. Key insights including (i) the teacher's role in enhancing student learning through creating a safe and empowering classroom culture where diverse perspectives are valued and (ii) practical considerations for lesson design and enactment , will be shared.

14:00-14:25
97560 | *Effect of Active Learning Approach on Senior Secondary School Students' Chemistry Performance in Rivers State, Nigeria*
Rosemary Ugonwa, University of Port Harcourt, Nigeria

This paper examined the effect of active learning approach on Senior Secondary School Students' Chemistry Performance in Rivers State. Active learning encourages learners to participate fully in their learning, think critically and make decisions, leading to improved retention and deeper understanding of the subject matter. The study adopted Quasi-experimental, non-equivalent pre-test, post-test control group research design for the research. A sample size of fifty (50) senior secondary school II students participated in the study. Two research questions and two null hypotheses guided the study. A validated instrument titled Chemistry Performance Test (CPT) was used to collate the data. The reliability of the instrument was established using Kuder-Richardson -21(KR-21) to obtain an index of +0.84. The research questions were answered using mean and standard deviation while the hypotheses were tested using ANCOVA at 0.05 significant level. Findings from the study revealed that the Chemistry students taught using active learning approach made higher learning performance gain than those taught with the traditional lecture method. There was a significant effect of the use of active learning approach over the traditional lecture method on the scores of the students. It was recommended among others that the use of active learning approach be adopted as a learning approach in the teaching and learning of Chemistry at all levels of education to enhance learning and improve students' performance in Chemistry.

13:10-14:50 | Room 705 (7F)

Thursday Onsite Parallel Session 3

ACE2025 | Foreign Language Education and Applied Linguistics

Session Chair: Mayeth Elloran-Avenido

13:10-13:35
98380 | *Exploring Second Language Student Use of Applications in Writing*
Ian Davison, Rabdan Academy, United Arab Emirates

This study explores second language (L2) student use of applications in writing in an English Medium Instruction university in the UAE. A structured questionnaire was completed by students (n=214) to determine how students used applications to help to produce the written assignment they were required to submit. This study looked at the impact of technology on students writing and examined what they primarily used applications for. It also looked at the degree to which students accept the changes recommended by the applications that they use and examined students' opinions about the ethical use of applications in their writing. To further analyze these opinions, follow up semi-structured interviews were conducted with a group of randomly selected participants (n=20) to help to explain student answers. Results revealed that students had differing opinions about the impact of technology on improving student writing, saving time, encouraging independence, or promoting learning. These also indicated that learners seemed to review and scrutinize the changes recommended by applications. Finally, the results indicated that while learners generally accepted the use of applications in writing, they had certain reservations about how it should be used. This study provides a nuanced picture of L2 students' use of technology in writing and suggests that learners may benefit from its use.

13:35-14:00
No presentation

14:00-14:25
94612 | *DeepSeek as a Tool to Help English-Speaking Students Learn Portuguese as a Second Language*
Jeanine Couto, Winston-Salem State University; American Public University System, United States

DeepSeek R1, released in January 2025, is an advanced AI research company that can generate text and assist students in their second language acquisition. It has the capability of explaining words and suggesting improvements to students' sentences, among other useful aspects of language learning. In this presentation, I will show some ways my English-speaking college-level students use DeepSeek as a powerful tool to improve their Portuguese as a second language skills. My presentation aims to showcase some of the benefits of being immersed in several activities that speed up the learning process, such as real-world applications, the creation of automated exercises, gamification, immersive learning experiences, speech recognition, and pronunciation practice. DeepSeek also helps students with disabilities by providing visual aids, speech-to-text, and text-to-speech to make learning Portuguese more accessible. Despite limitations such as no voice interaction, I will show measurable improvements through rubric assessment in students' writing.

14:25-14:50
100229 | *Challenges and Interventions in Technologically-driven English Language Instructional Materials*
Mayeth Elloran-Avenido, Cebu Technological University, Philippines

The inevitable emergence of technological advancements has a significant impact on the use of English language instructional materials. Nevertheless, English teachers seek ways to carry out the English lessons more effectively and successfully. This paper intends to explore the challenges encountered and interventions pursued by the English language teachers in integrating technologically-driven instructional materials. The study used the qualitative method of research employing the phenomenological method to gather essential data through interviews with the 16 informants. The English teachers espoused the technologically-driven English language instructional materials to address the academic demands of 21st-century learners. Yet, they encountered some challenges, which were alleviated through corresponding interventions, as identified through thematic analysis. The challenges faced include insufficient instructional resources, the unavailability or instability of internet connections, unfamiliarity with online platforms, learners' lack of motivation, materials' suitability to students' needs, overloading of online resources, time constraints, and financial support. Amidst the challenges besetting them, the English teachers sought interventions, such as sharing their resources with learners, preparing interesting web-based instructional resources, strengthening their linkages with the community for the provision of instructional resources, and undergoing digital training to navigate online platforms. The result of the study evinces that challenges in employing technologically-driven English language instructional materials hampered the English teachers in delivering their respective topics. Still, their interventions helped them in overcoming those challenges. It is recommended that the school administrators consider the results of the study to address the challenges in implementing technology in English language instruction.

13:10-14:50 | Room 707 (7F)

Thursday Onsite Parallel Session 3

ACE2025 | Innovative Technologies in Education

Session Chair: Laura Cormio

13:10-13:35

98513 | *EduTechPJ: A Digital Competency Module for Physical Education Teachers*
Noor Azizah Abd Rahman, Universiti Kebangsaan Malaysia, Malaysia
Nurwina Anuar, Universiti Kebangsaan Malaysia, Malaysia
Aidah Abdul Karim, Universiti Kebangsaan Malaysia, Malaysia
Ahmad Rizal Mohd Yusof, Universiti Kebangsaan Malaysia, Malaysia

The aim of this study was to investigate the development and evaluation of the EduTechPJ Module in enhancing the digital competencies of secondary school Physical Education teachers. The module was developed using the ASSURE Instructional Model and adapted from the European Framework of Digital Competence of Educators (DigCompEdu), incorporating elements of Connectivism, Boyatzis' Competency Theory, and collaborative learning strategies. This design and development research was structured into three key phases: i) needs analysis; ii) design and development; and iii) implementation and evaluation. The needs analysis phase identified the demand for a module integrating digital technology elements, using a mixed-method approach via semi-structured interviews and surveys. In the design and development phase, the Fuzzy Delphi Method was used to obtain expert consensus on module content and pedagogical strategies. The final phase involved implementation and evaluation to assess usability and effectiveness in real training contexts. Findings revealed that the module, grounded in Connectivism, Boyatzis' Theory, and the DigCompEdu Framework, significantly improved teachers' digital competencies, as evidenced by pre- and post-test results. Usability testing also showed high scores across usefulness, satisfaction, and ease of use, confirming the module's practicality, accessibility, and relevance. Additionally, the training led to sustained behavioural changes, with teachers effectively applying newly acquired skills in schools to enhance teaching delivery and professional tasks. These findings highlight the EduTechPJ Module as an effective and practical training solution to support the integration of technology in teaching practices, particularly among Physical Education teachers.

13:35-14:00

101623 | *STEM-Project Based Learning Integrated with Engineering Design Process to Develop Problem Solving Skill and Collaborative Skill of 11th Grade KOSEN*
Jutharat Sunprasert, King Mongkut's University of Technology Thonburi, Thailand
Natthaporn Srichaikham, King Mongkut's University of Technology Thonburi, Thailand
Tas Yusoontorn, King Mongkut's University of Technology Thonburi, Thailand

Problem-solving and collaborative skills are key components of Learning and Innovation Skills essential for 21st-century careers. These skills enable learners to think analytically and systematically, coordinate tasks, and cooperate effectively in developing solutions to achieve goals. This study aims to develop the problem-solving and collaborative skills of Grade 11 students in the KOSEN program at KMUTT through the Project Work course by integrating the Engineering Design Process (EDP): Define, Design, Fabrication, Experiment, and Presentation. The study was conducted with 32 students, using a free-response problem-solving test and a collaboration satisfaction survey administered before and after the implementation of the learning model, which encouraged teamwork through brainstorming solutions, dividing responsibilities for creating a workpiece, and presenting the group work. The research results found that (1) the scores on the problem-solving test after learning were significantly higher than before learning at the .05 level, and (2) students rated their collaboration experiences as 'good' to 'very good,' though challenges remained in allocating tasks and responsibilities within groups. Overall, the findings demonstrate that integrating STEM-PjBL with EDP effectively enhances students' problem-solving ability and promotes collaborative learning experiences.

14:00-14:25

97526 | *An Exploratory Study of Practitioner Experiences and Implementation Obstacles in Integrating Immersive Technologies in Online Learning*
Aisyamariam Abdul Uzza, Taylor's University, Malaysia
Analisa Hamdan, Asia Pacific University of Technology and Innovation, Malaysia

The promise of immersive technologies, such as Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), and Extended Reality (XR) to enhance online learning experiences has gained significant attention (Baxter et. al., 2024). Yet, much of the existing discourse focuses on technological capabilities and pedagogical frameworks, with limited attention paid to the experiences of those directly responsible for implementation, and to those expected to benefit from it (Owidi et. al., 2024). This study aims to address the gap by exploring how learning experience designers, online learning educators, and learners navigate the realities of adopting immersive technologies in higher education. This exploratory paper investigates practitioners' and learners' perspectives on immersive learning initiatives and the gaps between technology and practice. Using a qualitative exploratory approach, the research draws on in-depth semi-structured interviews with practitioners and students from Malaysian universities. The study investigates practical obstacles, including infrastructural limitations, pedagogical adaptation challenges, digital competency gaps among both staff and learners, issues of accessibility and inclusion, and the level of institutional commitment to sustain integration (Sunardi et. al., 2025). Findings are expected to reveal emotional and logistical burdens and disconnects between strategic ambitions and classroom realities. By centering practitioners' and learners' voices, the paper contributes grounded insight to the discourse on immersive online learning, offering a critical input for more context-sensitive, inclusive, and sustainable design efforts. This research provides foundational evidence for future work in policy alignment and framework development, serving innovation goals and the day-to-day needs of educators and learners in online learning.

13:10-14:50 | Room 707 (7F)

Thursday Onsite Parallel Session 3

ACE2025 | Innovative Technologies in Education

Session Chair: Laura Cormio

14:25-14:50

100469 | *How Should Immersive Learning Spaces Be Designed? Formalising the Intersection Between School Design and XR Technologies*

Laura Cormio, Foggia University, Italy
Angelo Rega, Pegaso University, Italy
Maria Ermelinda De Carlo, Pegaso University, Italy
Pierpaolo Limone, Pegaso University, Italy
Maura Mengoni, Polytechnic University of Marche, Italy

In recent years, the design of learning spaces has increasingly gained traction in school contexts, capturing the attention of scholars, architects, and educational communities. Following a long period of standstill in the condition of school buildings, European countries have undertaken significant efforts to renovate and modernise their school facilities through new policies and design guidelines. At the same time, a major trend in education has emerged: the adoption of eXtended Reality (XR) technologies to support and enhance learning experiences. However, despite the proliferation of research and practical implementations in both fields, physical space design and immersive learning experiences, there remains a lack of an integrated theoretical framework linking the two.
Therefore, this study aims at creating a unified theoretical framework to represent and describe how virtual environments supporting learning experiences should be designed, outlining first practical indications on how the various key principles to design physical spaces can be translated in virtual environments. Using thematic analysis, the research examines key international documents and guidelines to identify the core design features and pedagogical principles on both fronts. These are then intertwined through the construction of a correlation matrix that highlights alignments and points of translation between physical and virtual design strategies. While the qualitative findings of this study require further analyses such as ethnographic techniques or quantitative assessments, this work represents a first step towards bridging the fields of educational architecture and immersive learning in that it provides preliminary design guidelines for XR learning environments.

13:10-14:50 | Room 708 (7F)

Thursday Onsite Parallel Session 3

ACE2025 | Special Topics in Education

Session Chair: James Kaizuka

13:10-13:35

101300 | *From Theory to Practice: Evaluating Short-Term Project-based Learning for Design Thinking Pedagogy*
Yuanyi Liao, The Hong Kong Polytechnic University, Hong Kong
Henry Ma, The Hong Kong Polytechnic University, Hong Kong

Design thinking is primarily taught through three pedagogical approaches: project-based, lecture-based, and workshop-based learning. Project-based learning is common in art and design education. It emphasises hands -on practice and supports the development of tactic knowledge, such as brainstorming, experimentation, and problem solving. Lecture-based learning, more common in non-design disciplines, prioritises theoretical understanding but often lacks practice. Workshop-based learning offers a structured, step-by-step format aligned with the stages of the design thinking process. Although project-based learning is highly effective, it typically requires a significant amount of time and sustained engagement. This study addresses the challenges of implementing design thinking pedagogy within a limited time frame by evaluating a short-term, project-based activity aimed at cultivating core design thinking skills. This study adopted a qualitative approach, with nine graduate students from design and non-design backgrounds as participants. The participants were divided into three groups and tasked with solving a tangible, time-bound problem that required creative ideation, prototyping, and testing. Data was collected through observation, video and photographic recording, and thematic analysis of post-activity reflections. The results showed that even in a brief intervention, students demonstrated greater awareness flexibility, openness to experimentation, and reflective learning. This exercise served as a facilitator for mindset shifts and interdisciplinary collaboration. This study validated that short-term, domain-neutral activities are effective teaching tools for design thinking and contribute to instructional design. Simplified experiential formats have potential in reinforcing theory, promoting the acquisition of tacit knowledge, and supporting inclusive, interdisciplinary learning.

13:35-14:00

96740 | *Understanding Behavioral Engagement in Project-Based Learning: Key Influencing Factors*
Maria Coney Pallones, Ateneo De Manila University, Philippines

Project-Based Learning (PBL) is a student-centered instructional approach where learners actively explore real-world problems and work toward creating meaningful products. It is widely recognized for promoting student engagement, collaboration, and academic achievement. However, while many studies confirm the overall effectiveness of PBL, few investigate the specific mechanisms that influence and sustain behavioral engagement, defined as students' active participation, persistence, and effort, particularly in basic education education settings. This study addresses that gap by examining how key features of PBL, as perceived by teachers, support behavioral engagement among young learners. Using Self-Determination Theory (SDT) as a framework, semi-structured interviews were conducted with teachers, and the data were analyzed thematically. Three critical factors emerged: (1) voice, choice, and ownership, which promote autonomy; (2) scaffolded support and constructive feedback, which build competence; and (3) collaboration and teacher-student relationships, which strengthen relatedness. Teachers consistently reported that when these psychological needs are met, students show higher levels of motivation, engagement, and investment in their learning. The study also found that the benefits of behavioral engagement are cyclical, greater engagement leads to better project outcomes, which in turn reinforce motivation. These findings highlight the importance of intentional PBL design that considers students' psychological needs. The study recommends that educators be equipped with training that integrates SDT principles into PBL implementation. Doing so can help create a motivational ecosystem that supports persistent, active, and joyful learning in elementary classrooms.

14:00-14:25

96989 | *Industry-Driven Capstone Projects: Fostering Self-Efficacy, Adaptive Expertise and Ethical Problem-Solving in Engineering Students*
Eileen Fong, Nanyang Technological University, Singapore
Jeanette Choy, Nanyang Technological University, Singapore
Mi Song Kim, Western University, Canada

Engineering graduates must develop not only technical skills but, more importantly, adaptive expertise in order to effectively navigate the challenges of an ever-evolving knowledge economy. To meet these industrial demands, a senior-year materials engineering capstone course was redesigned to infuse industry partnership, while adopting a design thinking framework to teach problem-solving. Within this capstone, students collaborated in teams to take on real-world problem statements, under the guidance of faculty and industry mentors over 13 weeks. This study explores how industry-driven projects contribute to developing adaptive expertise, enhancing their self-efficacy, fostering persistence in pursuing an engineering career, and strengthening ethical decision-making. We utilized a mixed-methods approach which combined both qualitative and quantitative data to explore the impact of a senior-year materials engineering capstone course. The qualitative phase involved collecting student reflections on their experiences with industry-driven projects. In the quantitative phase, pre- and post-course survey instruments were administered to 150 students to measure changes to various factors in response to their capstone experiences. Exploratory factor analysis and confirmatory factor analysis were used to examine the underlying factor structure and to validate the measurement model. Four key factors related to self-efficacy in problem-solving, ethics, adaptive expertise and persistence in engineering were identified. The t-test also revealed that all four factors improved as a result of the course activities. Findings from our work will provide valuable insights for educators looking to design capstone courses for engineering undergraduates. Finally, educational and theoretical implications will also be discussed.

13:10-14:50 | Room 708 (7F)

Thursday Onsite Parallel Session 3

ACE2025 | Special Topics in Education

Session Chair: James Kaizuka

14:25-14:50

97302 | *Empowering Protection and Empowerment: Assessing the Impacts of ODA Scholarships on Human Security in Kenya, Rwanda, Egypt and South Africa*

James Kaizuka, Japan International Cooperation Agency, Japan

Japan's ODA strategy is rooted in the concept of 'human security', an approach to development which is rooted in the principles of people-centeredness, comprehensiveness, prevention-orientedness, and context-specificity and which aims to secure a world in which people can live in dignity, free from fear and want. As one component of its strategy to pursue these ideals, Japan, through its aid agency JICA, offers ODA scholarships to exceptional individuals from developing countries, in order that they may better contribute to furthering human security upon their return home. With pressing issues such as poverty, climate change, and economic inequality being widespread, it is vital that the impacts of these scholars on these human security issues be examined, but the existing academic literature is largely limited to examinations of the individual outcomes of ex-participants. Drawing on extensive interview and survey data from four African counties, this research uses a case study of the ABE Initiative scholarship, which has to date accepted more than 1900 participants from across Africa. It examines how ABE alumni have expanded human security for others, examining their impacts on both the protection and empowerment aspects of the human security approach. The study finds that while ABE scholars have in some cases greatly enhanced human security, many have been held back by weak positionality. It ultimately argues that for the benefits of international scholarship aid to be fully realized, continuous empowerment through advocacy and follow-up support is vital to ensure that the positionality of alumni is as strong as possible.

15:05-16:45 | Room 601 (6F)

Thursday Onsite Parallel Session 4

ACE2025 | Higher Education

Session Chair: Dennis McCornac

15:05-15:30

101551 | *Encouraging the Implementation of Sustainable Development Practices in Open Distance Learning Higher Education Institutions: Utilizing Structural Equation Modeling for Analysis*

Astri Dwi Jayanti Suhandoko, Universitas Terbuka (Open University), Indonesia
Lidwina Sri Ardiasih, Universitas Terbuka, Indonesia
Fawzi Rahmadiyan Zuhairi, Universitas Terbuka, Indonesia

This study investigates barriers to sustainable development (SDG 4) in Indonesia's online distance education, using Universitas Terbuka (UT) as a critical case. Despite national policy commitments, institutional adoption faces challenges including high staff turnover, resource fragmentation, and unclear implementation pathways. Employing a quantitative design, data researcherre collected from 1,152 UT staff across 39 Indonesian regions and one overseas office via mixed online/face-to-face surveys. Structural Equation Modeling (SEM-PLS) analysis revealed: (1) Leadership Style, Behavioral Control, and Organizational Commitment significantly drive Sustainable Development Practices ($\beta = 0.38$, $p<0.01$; $\beta = 0.29$, $p<0.05$; $\beta = 0.41$, $p<0.001$); (2) Turnover Intention mediates sustainability success, explaining 33% of variance. By extending the Theory of Planned Behavior (TPB), researchers show Organizational Commitment as the pivotal filter translating leadership into behavioral change. Practical recommendations include: (a) embedding sustainability KPIs into performance standards, (b) charismatic leadership development programs, and (c) targeted retention initiatives for high-impact roles. Future research should explore green compensation models to strengthen UT's sustainability-turnover nexus.

15:30-15:55

101506 | *The Colonial Legacy and Higher Education Policy: A Critical Understanding of the University System of Bangladesh*

Sowmit Chandra Chanda, BRAC University, Bangladesh

The paper argues that Bangladesh's higher education policy has resulted in a fragmented university system that prioritizes rapid expansion over integrated and coordinated growth. The state's focus on establishing new universities, particularly by granting university status to numerous institutions without an effective coordinating framework, has created a policy gap that impedes affiliation and integration with specialized colleges, schools, and institutes. This approach diverges from global standards and the historic legacy of colonial models. Expansion in peripheral regions is primarily driven by development agendas, labor market demands, and political interests rather than academic objectives, which undermines academic coherence and productivity. To clarify this policy gap, this study compares Bangladesh's approach with those of other post-colonial countries. India's centralized affiliation model promotes coherence and alignment with national goals, while Ghana's decentralized efforts demonstrate the value of strategic integration. The study analyzes this policy gap and proposes a cohesive structural taxonomy for Bangladeshi higher education. Employing a 5E policy analysis framework, which assesses effectiveness, efficiency, ethical dimensions, alternatives, and recommendations, the study reviews policy documents and secondary sources on Bangladesh's educational history, academic structure, sociopolitical context, employment outcomes, and structural challenges since independence in 1971.

15:55-16:20

No presentation

16:20-16:45

96498 | *Addressing Corruption in Higher Education in Asia: A Sea Change Required by Both "Gatekeepers" and Constituents*

Dennis McCornac, Georgetown University Qatar, Qatar
Anne Cullen, Griffith University, Australia

Corruption in the higher education sector undermines a nation's ability to obtain an international standard educational system. Nevertheless, scholarly work on corruption in higher education is relatively limited, data is difficult to obtain, and there is no clear consensus on a definition of corruption. The first part of this paper analyses the factors fostering corruption in the education process, with particular emphasis placed on the experience of transition economies, such as Vietnam and China. The second part expands on the formula by Klitgaard et al. (2000), which states that Corruption = M(Monopoly Power) + D(Discretion) + A(Accountability), focusing on the extent to which each component is influenced by the "gatekeepers" and constituents. Finally, based on informal interviews, we develop a trail of corruption model that enables policymakers to target the sectors that most need to change to reduce corruption effectively. We conclude that fighting corruption will require policies that promote transparency and accountability. Stakeholders must recognize that education is a right and privilege that is earned, not a commodity to be bought and sold.

15:05-16:45 | Room 603 (6F)
Thursday Onsite Parallel Session 4
ACE2025 | Higher Education
Session Chair: Carla Pinto

15:05-15:30
100792 | *Artificial Intelligence in Accounting and Business Education*
Meyliana Meyliana, Maranatha Christian University, Indonesia
Ming Kuang Tan, Maranatha Christian University, Indonesia
Oktavianti Oktavianti, Maranatha Christian University, Indonesia

The rapid rise of Generative AI (GenAI) is enhancing not only students' technical abilities but also their analytical, strategic, and ethical competencies in Accounting and Business education. Lecturers' intention to integrate GenAI into teaching plays a vital role in this progress. Therefore, identifying what influences this intention is crucial. This study fills a gap in the literature by combining the Technology, Pedagogy, and Content Knowledge (TPACK) framework, adapted from Yang et al. (2025), with the Technology Acceptance Model (TAM). It also investigates how negative emotions (such as anxiety and discomfort) and motivational factors (competence, autonomy, and social satisfaction) moderate lecturers' intention to use GenAI in teaching. A quantitative survey was conducted using Google Forms, targeting Accounting, Management, and Business lecturers across Indonesia. Structural Equation Modeling (SEM) was applied to 250 valid responses. The results show that TPACK significantly influences both TAM constructs (perceived usefulness and ease of use), and also directly affects lecturers' intention to integrate GenAI. Perceived usefulness has a positive effect on intention, while ease of use does not. Moderation analysis reveals that higher GenAI competence can weaken the effect of TPACK on intention. Conversely, higher anxiety about GenAI strengthens this effect. These findings provide new insights into how cognitive and emotional factors shape lecturers' intention to integrate GenAI, offering valuable input for future policies and training programs in Accounting and Business education.

15:30-15:55
100315 | *Make It Count: An Impact Review of a Summer Bridge Program on Student Math Placement Scores*
Verna Zafra-Kasala, University of Guam, Guam

The University of Guam's five-week Triton Summer Bridge Program (TSBP) was designed to provide academic and student skills support to new incoming freshmen who were underprepared for college-level math and/or English courses. This review focuses on the students who participated in and completed the math preparation portion of the program (N = 70) and examines changes in their performance on the university's math placement test using pretest and posttest scores. An analysis of the results revealed an overall improvement in the students' performance in the math placement test after completing the TSBP, with 46 students (65.7%) placing into a higher level math course. Among the 24 students (34.3%) who maintained their original placement levels, 14 demonstrated gains in their math scores, indicating growth even without a change in course level. These findings suggest that focused, intensive programs like TSBP have the potential to improve placement outcomes and college mathematics readiness for underprepared students.

15:55-16:20
98388 | *Synergizing Challenge-based Learning and Industry-in-curriculum for Applied Network Security Education*
Lei Sun, Ngee Ann Polytechnic, Singapore

In today's rapidly evolving cybersecurity landscape, educators must go beyond traditional pedagogies to prepare students for complex, real-world challenges. This research presents an innovative teaching and learning model that synergizes Challenge-Based Learning (CBL) with Industry-in-Curriculum (IIC) to close the persistent gap between theory and practice in cybersecurity education. Applied within a core Network Security module for diploma students in Cybersecurity & Digital Forensics, the approach engages learners in solving authentic, industry-aligned problems through the structured CBL phases—Engage, Investigate, Act. Challenges were co-designed with industry professionals and mirrored real-world tasks, requiring students to act as security architects tasked with designing and defending enterprise-grade network environments. Learning was deepened through flipped learning strategies, hands-on labs with professional tools (e.g., Palo Alto firewalls), and weekly reflection-based feedback. Implemented over two semesters (n=248), the research yielded strong outcomes: high levels of student engagement, consistently positive Module Experience Survey (MES) results, and demonstrable skill transfer to downstream modules and internships. External examiners and industry partners validated the curriculum's authenticity, with one internship success leading to new institutional collaboration. By embedding real-world cybersecurity scenarios into a learner-centred, action-oriented framework, this research offers a scalable and impactful model for applied technical education. It highlights how thoughtfully integrated pedagogical innovation can drive deeper learning, strengthen industry alignment, and better prepare graduates for the demands of a rapidly changing digital workforce.

16:20-16:45
96176 | *MATH-DIGGER ER1: A Mathematical Approach to Sustainable University Facilities*
Carla Pinto, Polytechnic of Porto, Portugal
Deolinda Rasteiro, Polytechnic University of Coimbra, Portugal

This study explores the Game User Experience (GUX) of MATH-DIGGER Escape Room 1, an educational gamified tool developed to enhance mathematical learning among engineering students through inquiry-based learning (IBL). The escape room integrates sustainability, energy efficiency, and real-world problem-solving, contextualized within Calculus I topics such as interpolation and integral calculus. Participants included engineering students from ISEC – Polytechnic University of Coimbra and ISEP – Polytechnic of Porto. After completing the escape room, students responded to a structured questionnaire based on GUESS-18, a validated short version of the Game User Experience Satisfaction Scale. The instrument included demographic questions and 18 items addressing core GUX dimensions: usability/playability, narrative, play engrossment, enjoyment, creative freedom, audio aesthetics, personal gratification, social connectivity, and visual aesthetics. Data were analyzed using IBM SPSS 29 to identify trends and correlations. Results indicated high levels of engagement and satisfaction. Students particularly appreciated the immersive narrative and its relevance to real-world sustainability issues. Strongest ratings were observed in enjoyment, social connectivity, and visual aesthetics. Areas for improvement included creative freedom and audio elements. Additionally, demographic-based differences in user experience offered insights for tailoring gamified activities to diverse learners. This research contributes to the growing body of work on gamification in higher education and provides actionable guidance for designing escape rooms that foster critical thinking, collaboration, and mathematical competence in engineering curricula.

15:05-16:45 | Room 604 (6F)
Thursday Onsite Parallel Session 4
ACE2025 | Professional Training, Development and Concerns in Education
Session Chair: Betty D Primus

15:05-15:30
96894 | *Assessing Digital Citizenship Among Students and Technology Competency of Teachers*
Mary Anthony C Sieras, Ateneo de Manila University, Philippines

Digital citizenship and technology competency are vital for effective teaching and learning in today's technology-driven educational environment (Ribble, 2011). Despite widespread technology use, challenges persist regarding students' responsible and ethical use of digital tools, highlighting the need for improved digital citizenship education (Ribble & Bailey, 2004). Teachers' proficiency in integrating technology is key to fostering students' positive digital practices (Department of Education, 2017). This study aimed to assess the digital citizenship levels of junior high school students and the technology competence of their teachers. Grounded in Mike Ribble's nine elements of digital citizenship and the Philippine Professional Standards for Teachers (PPST), it investigated the influence of age, teaching experience, subject taught, and ICT training on teachers' technology skills. Using a descriptive research design and proportionate stratified sampling, data were collected from 360 students and 48 full-time teachers via a modified Digital Citizenship Audit and Technology Competency rubric. Quantitative analysis, including means, percentages, and F-tests, was applied. Results revealed moderate to high technology use by students, accompanied by above-average misuse, despite recognizing digital citizenship's importance. Teachers demonstrated high to distinguished technology competence but lacked awareness of digital citizenship integration in instruction. The study highlights the gap between technology use and digital citizenship practice, underlining the need for professional development focused on digital citizenship education. These findings provide a foundation for crafting policies and programs to promote ethical, safe, and effective technology use in schools, contributing to the development of responsible digital citizens.

15:30-15:55
97899 | *A Contextual Approach to Educational Leadership Development in Kazakhstan: Toward a Competency-based Professional Model*
Ruslan Togaibayev, National School of Physics and Math, Kazakhstan

Educational leadership is increasingly acknowledged as key to improving school performance and managing complex reforms. In Kazakhstan, secondary education is undergoing significant transformation in response to global and national demands for innovation, inclusivity, and quality. Despite policy efforts, there is a lack of coherent, context-sensitive strategies for developing school leaders who can effectively lead change and build collaborative, student-centered cultures. Existing professional development is often fragmented, overly theoretical, and disconnected from practical challenges. This study explores Kazakhstan's current approach to school leadership development and examines the potential for creating a more sustainable, inclusive, and competency-based model for principals and their deputies. Using an interpretivist paradigm, the research employs a qualitative case study with two phases: a review of international and national leadership development policies and practices, and semi-structured interviews with school leaders, trainers, and policymakers. Findings show that while initiatives like the "1000 Leaders of Education" programme demonstrate political will, implementation remains inconsistent and top-down. Current formats often lack mentoring, collaborative learning, and real-world application. Interviewees emphasized the need for systemic reforms integrating mentorship, emotional intelligence, instructional leadership, and strategic planning. The study proposes a context-sensitive model for Kazakhstan, adapted from international best practices. It contributes to global discourse on school leadership by bridging theory and practice, and aligns with the UN Sustainable Development Goals on quality education and strong institutions. The model aims to support visionary, adaptive, and equity-driven leaders capable of driving educational transformation in Kazakhstan.

15:55-16:20
101154 | *Self-Reflection and Adaptation on Teaching: Integration of Inclusive Pedagogy and Technology*
Osmud Rahman, Toronto Metropolitan University, Canada

Learning and teaching are "no longer just about the accumulation [delivery] of knowledge and information" (Trinidad, 2020; p. 1014). Teaching is an evolving practice that requires continual self-reflection and adaptation. This critical process allows us to grow as an educator and meet the changing needs of our students. Indeed, teaching is not merely about delivering knowledge but also about fostering an environment where students feel inspired, challenged, and safe to learn and exchange ideas. In fostering teaching and learning, I am inspired by Paulo Freire's critical pedagogy, which emphasizes the importance of dialogue and reflection in the learning process. Freire's (1973; p. 38) assertion that "education is an act of love, and thus an act of courage." In addition, I believe that technology enables new forms of transmitting and sharing knowledge, which can complement in-person learning and extracurricular activities. For the research methodology of this study, I employed an autoethnographic approach to reflect on my teaching trajectory. Several of my undergraduate and graduate courses related to culture, art and design were used as sites for reflection, illustration, and knowledge exchange. This study focuses on four key areas: (1) integrating diverse and inclusive pedagogy, (2) technology integration, (3) incorporating research into teaching, and (4) emphasizing lifelong learning. These interrelated objectives guide my efforts to create a dynamic and responsive classroom environment that accommodates diverse learning styles and backgrounds. I believe that my teaching experiences and observations can provide valuable insights to educators, scholars, and students alike.

16:20-16:45
95534 | *Reimagining Leadership for Professional Development in Education Reform: Insights from Sabah, Malaysia*
Betty D Primus, Sabah Education Department, Malaysia

Effective leadership is central to sustainable education reform, particularly in its capacity to support meaningful teacher professional development (TPD). While leadership for school improvement has been widely examined, there remains a scarcity of empirical evidence on how leadership specifically shapes TPD systems in Malaysia—especially in underrepresented regions like Sabah—and across much of Asia. This study addresses that gap by investigating how leadership at various system levels (school, district, and policy) contributes to or hinders the implementation of TPD and learning that are responsive to national reform agendas and local school contexts. Malaysia's federal education system is formally centralised, with the federal government exerting strong control over policy direction and resource allocation. While decentralisation has been promoted rhetorically, it remains largely symbolic (Ostwald, 2017), with minimal practical delegation of decision-making power to schools or state-level actors. This dynamic poses significant challenges for school leaders attempting to lead and support context-sensitive professional development initiatives. Drawing on a qualitative multiple-case study of schools in Sabah, this study introduces the Sabah Emergent TPD (SET) model—a framework comprising three interconnected layers: internal reform agents, middle-tier support, and policy alignment. Anchored in complexity theory and systems thinking, the model reframes leadership as an adaptive, embedded force that supports TPD and learning within highly centralised yet locally diverse systems. This paper highlights the pivotal role of leadership in shaping the direction, coherence, and effectiveness of TPD in Malaysia. In hierarchical systems across Asia, school and system leaders can mediate policy, cultivate professional cultures, and drive sustainable reform.

Notes

15:05-16:45 | Room 605 (6F)

Thursday Onsite Parallel Session 4

ACE2025 | Language Learning and Multilingual Education

Session Chair: Reiko Kato

15:05-15:30

101375 | *Empowering Student Voice Through Mother Tongue Broadcast: A Multilingual Broadcast Initiative in a Superdiverse School Environment*

Mohd Fuad Bin Salim, Millennia Institute, Singapore

In an increasingly multilingual and multicultural society like Singapore, the preservation and active use of heritage languages among youth is both a challenge and a necessity. This proposal presents a student-led broadcast initiative designed to promote the use of Mother Tongue Languages (MTLs)—Malay, Chinese, and Tamil—among pre-university students. By using the school's public address (PA) system as a platform for a 15-minute weekly radio-style segment, students are given authentic opportunities to script, present, and curate content in their MTLs. Grounded in student agency and experiential learning, this programme empowers learners to engage with their cultural and linguistic identities in public, performative ways. The broadcasts are thematically organised and rotational across languages, ensuring inclusivity and exposing the broader school community to multiple cultural narratives. Students collaborate in small groups to plan, write, and vet scripts, while integrating music, storytelling, and spoken reflections—fostering multiliteracies and public speaking confidence. Initial feedback shows that participants gained greater confidence in using their MTLs, and developed a renewed appreciation of their cultural heritage. Framed within a pedagogical model that emphasises collaborative and culturally responsive teaching, the initiative provides a compelling case for plurilingual practices in formal education settings. It also reflects broader discussions in language policy, youth-led revitalisation efforts, and intercultural school ecologies. This presentation offers a reflective account of the programme's conception, execution, and observed outcomes, and contributes to ongoing dialogue on student-led multilingual education in superdiverse contexts.

15:30-15:55

97300 | *Examining the Relationship Between TOEIC Scores and Employability Outcomes of Filipino Graduates*

Ramil Santos, National University Philippines, Philippines
Johjen Mag-atas, National University Philippines, Philippines
John Carlo Sobrepeña, National University Philippines, Philippines
Adriane De La Cruz, National University Philippines, Philippines
Charmaine Meimban, National University Philippines, Philippines

This study investigated the correlation between TOEIC (Test of English for International Communication) scores, aligned with the Common European Framework of Reference for Languages (CEFR), on the employability and workplace performance of recent graduates from higher education institutions in Bulacan, Philippines. Utilizing a mixed-methods explanatory sequential design, the research combined quantitative data from 50 TOEIC-certified graduates with qualitative insights from 10 of their employers. Quantitative findings revealed a clear positive correlation between higher English proficiency and key employment outcomes, such as faster job placement, a greater number of job offers, and higher self-perceived employability; particularly, a 0.86 Pearson r correlation between TOEIC scores and self-perceived employability. Graduates with C1 CEFR-level scores secured employment more rapidly and received significantly more job offers than their A1-level counterparts. Qualitative data, analyzed thematically, further revealed that C1-level employees exhibited strong communication competence, adaptability, and professionalism, whereas A1-level employees, although behaviorally competent, displayed limited verbal engagement and required more support in adapting to new tasks or tools. Across both groups, workplace behavior was consistently positive, highlighting that language proficiency did not influence work ethic. These findings reinforce the role of English language proficiency as a decisive employability factor and affirm the relevance of CEFR and TOEIC. The study recommends a stronger integration of CEFR-aligned language instruction in higher education curricula and greater collaboration between academic institutions and industry stakeholders. Delimitations of the study include its geographic and sample size constraints, suggesting directions for future research that could further contextualize language proficiency within diverse employment environments.

15:55-16:20

100250 | *Challenges in Recorded Presentation Assessments: A Case Study in Japanese as Foreign Language (JFL) Education*

Hiroshi Hasegawa, Curtin University, Australia
Gayathri Gamage, Murdoch University, Australia

In the evolving landscape of global education, digital technologies have transformed assessment practices, particularly in language learning contexts. This study explores the complexities of using recorded presentations as assessment tools in Japanese as a Foreign Language (JFL) course at the tertiary level. While recorded presentations offer flexibility and accessibility, especially for diverse student cohorts, they also introduce unique challenges for educators, particularly sessional academic staff responsible for marking. Drawing on four years of data (2021–2024) from a higher education institution in Australia, this research examines recorded oral assignments across four different unit levels that reflect students' progression from beginner to intermediate stages. A mixed-methods approach was employed to identify, categorize, and analyze the difficulties encountered during assessment. Thematic analysis revealed three major categories of challenges: (A) environmental and technical issues (e.g., poor audio/video quality, file compatibility), (B) academic integrity concerns (e.g., use of unauthorized assistance or AI tools), and (C) lack of awareness of assessment requirements (e.g., misunderstanding task instructions or criteria). The findings contribute to the broader discourse on assessment for learning (AFL) in digitally mediated environments, highlighting the need for strategic support for educators and clearer guidance for students. By enhancing marking efficiency and improving student outcomes, this study emphasizes the importance of thoughtful integration of technology in global education settings.

15:05-16:45 | Room 605 (6F)

Thursday Onsite Parallel Session 4

ACE2025 | Language Learning and Multilingual Education

Session Chair: Reiko Kato

16:20-16:45

101363 | *From Lingua Franca to Multilingual Place-Making: Autonomy and Positioning in Online International Collaboration*

Reiko Kato, Kyushu Institute of Technology, Japan

This paper examines students' multilingual experiences in collaborative online international learning (COIL) programs. In 2022–2023, the author, as teacher-researcher, designed and facilitated two COIL programs involving 52 university students from Japan and Malaysia who engaged virtually in group discussions. Participants brought diverse linguistic backgrounds, with English serving as the lingua franca. Drawing on Kocatepe's (2018) definition of learner autonomy as the capacity to transform spaces into places for learning through evaluating and shaping social practices and identities, the study explores how students negotiated their language practices, identities, and participation. Data were collected through seven post-program interviews, complemented by activity logs, online whiteboards, and reflection papers. Interviews, audio-recorded and transcribed with consent, were analyzed using key categories of language use (first language, English, own language, others' language), with positioning theory (Van Langenhove & Harré, 1999) as an analytic framework. Preliminary findings highlight the complexity of constructing multilingual learning places. Students reported varied evaluations of first language use, different levels of appreciation for each language, and a tendency to view competence in a single language as more favorable for identity negotiation. Their struggles were further shaped by cultural stereotypes and idealized images of group work, affecting how they voiced opinions and collaborated. These findings illustrate persistent challenges to the monolingual habitus, while underscoring the importance of recognizing multilingualism and translingualism as key conditions for fostering collective autonomy in COIL contexts.

15:05-16:45 | Room 607 (6F)

Thursday Onsite Parallel Session 4

ACE2025 | AI in Education

Session Chair: Lindelani Qwabe

15:05-15:30

101213 | *Hand-in-Hand with ChatGPT: Teachers' Utilization of ChatGPT to Promote Restorative Pedagogy in the Classroom*
Alexia Rosel Penales, De La Salle University Integrated School, Philippines
Jordi Fabricante, De La Salle University Integrated School, Philippines

The implementation of the MATATAG curriculum in the Philippines has encouraged stakeholders and educators to favor character-forming restorative practices, as it establishes the value of empathy, respect, and accountability. De La Salle University (DLSU), a leading research institution in the Philippines, advocates the Lasallian Reflection Framework (LRF), which follows the See-Judge-Act approach. This framework guides stakeholders in their professional ethics and pedagogy amid evolving educational practices in the country. Recently, the emergence of ChatGPT has encouraged educators from a specific Catholic university in Laguna, Philippines, to utilize the artificial intelligence (AI) tool in constructing their teaching content. Consequently, the researchers of this study aim to investigate how Christian Living and Good Manners and Right Conduct (CLGMRC) teachers from a specific Catholic university utilize ChatGPT in producing teaching materials grounded in the MATATAG curriculum's GMRC values and restorative practices through the Lasallian Reflection Framework. At present, this convergent parallel mixed-method research leverages teacher interviews and a survey with a Likert scale to elicit findings for the following: the facilitation of restorative practices through the use of the LRF, the challenges teachers face when adapting ChatGPT-generated content, and the ethical considerations recognized by the teachers when choosing ChatGPT-generated materials. Thematic analysis of developing data indicates early patterns in integration strategies. By exploring the intersection of ChatGPT and GMRC, this study aims to contribute to the discourse on AI literacy for teachers and the promotion of best practices in restorative pedagogy. Findings of the study will be presented at a subsequent stage.

15:30-15:55

98638 | *Mind and Machines: A Qualitative Study of University Students' Epistemic Beliefs and Critical Engagement with Generative AI*
Moyan Li, Beihang University, China
Chenming Zhang, Beihang University, China
Yubo Meng, Beihang University, China
Zikun Zhao, University of Auckland, New Zealand
Li Guo, Beihang University, China

This qualitative study explores university students' critical use of generative Artificial Intelligence (AI) tools in academic contexts, focusing on the relationship between epistemic beliefs and AI usage behavior. The study combined data from focus group discussions and semi-structured interviews with 26 students from Double First-Class universities in Beijing, representing various academic disciplines and educational levels (undergraduate, graduate, and doctoral). The total transcribed data amounted to 183,627 words. The findings highlight the complex relationship between epistemic beliefs—students' perceptions of knowledge and learning—and their critical engagement with AI. While AI tools significantly enhance efficiency in tasks such as literature review, data synthesis, and initial drafting, they also raise concerns about the potential erosion of independent thinking. Students with more sophisticated epistemic beliefs, who view knowledge as evolving and complex, were more inclined to use AI critically, integrating it into their cognitive processes while maintaining a reflective approach. In contrast, students with task-oriented learning attitudes tended to use AI for convenience, sometimes sacrificing critical evaluation. Additionally, AI was found to serve as both a cognitive aid and a cognitive shortcut, emphasizing the need for balance between efficiency and deep learning engagement. This research emphasizes the importance of fostering epistemic beliefs that support critical thinking and self-regulation in AI-assisted learning environments. It underscores the necessity of educational practices that encourage students to reflect on AI-generated content, ensuring that technology enhances rather than diminishes their cognitive development.

15:55-16:20

94837 | *Artificial Intelligence and Research: Attitudes Across Educational Disciplines and Levels*
Maria Salud Delos Santos, Cebu Technological University, Philippines
Rosalinda Guerrero, Holy Trinity University, Philippines

This study examined whether the acceptance of artificial intelligence (AI) can be predicted by the attitude toward research and individual correlates across disciplines and educational levels. It applies the Theory of Planned Behavior (Ajzen,1987) to study the relationship between attitudes toward research and acceptance of AI to explore how beliefs, social influences, and perceived control factors shape individuals' attitudes and intentions related to using and adopting AI technologies. The sequential explanatory mixed-methods design was employed to gather data among undergraduate and graduate students in Luzon, Visayas, and Mindanao who have recently enrolled in both research and technology in education using the General Attitudes Towards Artificial Intelligence Scale (GAAIS) by Schepman and Rodway (2023) and the Attitude Towards Research (ATR) by Papanastasiou (2005). Data were analyzed utilizing frequencies, percentages, means, standard deviations, ANOVA, and Multiple Regression. The findings revealed a neutral-to-positive attitude towards research ratio of 8:2 and a positive-to-negative attitude towards AI ratio of 8:2. Further, there was no significant relationship between individual correlates and attitude towards AI and no significant relationship between attitude towards research and AI. Three themes were generated, namely, the Know and the How, the Digital DISconnect, and the "Copy-and-Paste" Dependence World. The study concludes that while demographic characteristics are commonly considered factors in shaping attitudes toward technology, they may not be the primary drivers of attitudes toward AI in this context. The study recommends responsible AI-enhanced activities that can be developed.

15:05-16:45 | Room 607 (6F)

Thursday Onsite Parallel Session 4

ACE2025 | AI in Education

Session Chair: Lindelani Qwabe

16:20-16:45

96425 | *Integration of AI in the Curriculum of Hard and Hard Applied Knowledge Fields*

Lindelani Qwabe, Mangosuthu University of Technology, South Africa
Phiwayinkosi Gumede, Mangosuthu University of Technology, South Africa

The emergence of artificial intelligence (AI) tools such as ChatGPT presents a critical juncture for curriculum reform in science and engineering education. In African higher education institutions, where instructional practices remain traditional and teacher-centered, the integration of AI poses both significant opportunities and complex pedagogical challenges. This interpretive inquiry investigates how academic staff in STEM disciplines perceive, experience, and respond to the integration of AI within their teaching and curriculum design. Guided by the SAMR model, Technological Pedagogical Content Knowledge (TPACK), and the Teacher Change Framework (TCF). The study employs an interpretivist approach from semi-structured interviews with purposively sampled focus group of STEM lecturers. Followed by a thematic analysis of curriculum documents across three departments within a University of Technology. Findings reveal a prevailing emphasis on content transmission and low-level technological application but also highlight emerging examples of pedagogical experimentation and growing interest in transformative AI use. This study contributes a context-sensitive framework for AI integration that emphasizes faculty development, interdisciplinary collaboration, and institutional support structures tailored to the African higher education context. By foregrounding educator perspectives and institutional realities, the paper offers actionable insights for curriculum leaders and policymakers seeking to future-proof STEM education in an AI-driven world.

15:05-16:45 | Room 608 (6F)
Thursday Onsite Parallel Session 4
ACE2025 | Higher Education
Session Chair: Guilherme Augusto Caruso Profeta

15:05-15:30
No presentation

15:30-15:55
97024 | *Punitive, Preventive, Positive: Attempts to Control Academic Dishonesty at a Japanese University*
Joel Weinberg, Meiji University, Japan

This research explores three approaches to handling academic dishonesty: punitive, preventive, and positive. First, the history of cheating and the punitive approach is briefly discussed. Next, research results of a preventive approach that was used at a Japanese university are given. During this research, two surveys were conducted to gauge students' opinions about cheating, to account for the methods, and to measure the prevalence of cheating during post-reading quizzes. The survey results show that at least eleven forms of cheating on post-reading quizzes were used and that students are concerned about this issue. As a result of the surveys, the teacher instituted a preventive approach by restricting online access to the post-reading quizzes. Quiz results were analyzed pre and post restriction to assess how the change affected the students' reading output and quiz scores. The research finds that this preventive approach did not adversely affect reading output or post-reading quiz scores, but it is not clear that it effectively inhibited the students' from cheating. Finally, the positive approach is considered as an alternative measure. Data from a different research project is provided in the discussion section to support the use of honor codes.

15:55-16:20
101280 | *Reclaiming Humanistic Development Through Peace Education: A Relational Pedagogy of Care*
John Nguyet Erni, The Education University of Hong Kong, China

In an era dominated by neoliberal metrics prioritizing quantifiable outputs—such as publications, grants, and patents—universities increasingly sideline holistic student development and the integral role of care in education. This paper examines how Nel Noddings' pedagogy of care is enacted within a humanities curriculum at a market-driven Hong Kong university, revealing its potential to reorient education toward a new form of peace education. Peace education is here defined not as conflict avoidance or knowledge transmission, but as an ongoing practice of relational empathy and ethical accountability that transforms power structures, fosters deep listening, and nurtures capacities to co-create just, sustainable futures. Based on semi-structured interviews with 44 undergraduates across language studies, creative writing, and health communication, the study shows how educators and learners enact care as a strategic insurgency against alienation and disengagement. This pedagogy demands radical teacher-student reciprocity, turning feedback into dialogical, mutually nurturing exchange in both directions. Classrooms become transformative spaces where intellectual and emotional learning converge, fostering agency necessary for navigating global interdependencies. This relational praxis cultivates ethical responsibility extending beyond academics, shaping commitments to peacebuilding, social justice, and caring communities worldwide. The paper argues that embedding care pedagogy resists the dehumanizing forces of neoliberalism by developing capacities essential for sustaining pluralistic, peaceful global societies. It concludes with reflections on the theoretical and policy implications of care as foundational to peace education and global citizenship in the face of structural and geopolitical crises.

16:20-16:45
97392 | *Pop Culture in Education: a Bibliometric Study of Trends, Uses, and Gaps of Brazilian Research on Manga (2014-2024)*
Guilherme Augusto Caruso Profeta, University of Sorocaba, Brazil
Beatriz Oliveira Delboni, University of Sorocaba, Brazil

Given the demand for diverse didactic resources that promote engagement, identification, and effective cultural mediation, products of pop culture, such as Japanese comics (or manga), have drawn increasing interest from educators. This bibliometric study investigates how Brazilian academic research has addressed manga as an object of study over the past ten years, especially in the field of Education. Using the descriptor "mangá," we surveyed the Thesis and Dissertation Catalog of the Brazilian Federal Agency for Support and Evaluation of Graduate Education (Capes), identifying 73 Master's theses and doctoral dissertations produced in Brazil between 2014 and 2024. Results show a rise in scholarly interest beginning in 2020, mainly in Brazil's Southeast region. We developed a categorization matrix to classify the studies by focus: Reception and reinterpretation of manga (11%); Visual/aesthetic aspects (9.6%); Representation studies (31.5%); Intermedia adaptation and/or comparative literature (15.1%); Translation (4.1%); Informal education (2.7%); and Formal education (26%), the primary category of interest in this research. Out of the 19 studies focused on formal education, the majority (13) explored the use of specific manga titles as didactic tools for teaching content or form. Only four works examined manga as a collaborative creative process, proposing the production of manga during classroom activities. Most of these 19 studies (14) addressed Elementary or Secondary education, with none focusing on Higher Education. This absence points to a gap in the literature and highlights an opportunity for original research on manga creation as a pedagogical practice within the context of Higher Education.

15:05-16:45 | Room 703 (7F)
Thursday Onsite Parallel Session 4
ACE2025 | Learning Experiences, Student Learning and Learner Diversity
Session Chair: Fedor Duzhin

15:05-15:30
97565 | *Analysis of Student Failure Rates and Strategies to Promote Engagement and Attainment: A Case Study from University of Hertfordshire, UK*
Sahar Khajeh, University of Hertfordshire, United Kingdom

Monitoring students' failure rates, identifying the underlying reasons, and implementing appropriate strategies have gained substantial attention from universities, as a high failure rate—often leading to withdrawals—can significantly impact student progression and, consequently, the university's budget and overall performance. As a case study, we analyzed the failure rates of 26 undergraduate programs at the School of Creative Arts and Design at the University of Hertfordshire in the UK. Using various methods such as literature review, analysis of HR data, interviews with program and module leaders, one-on-one meetings with student representatives, and close conversations with specific students who failed, we gathered inclusive data reflecting both staff and student perspectives. This helped us identify the factors contributing to student failure and informed the development of strategies to promote student attendance, engagement, and achievement. Based on the findings, we proposed a compassionate and neurodivergence-inclusive program that encourages student collaboration in curriculum design through the creation of new platforms. Additionally, by facilitating peer-review workshops among lecturers—including permanent staff, part-timers, visiting lecturers (VLs), and casual staff—we gathered diverse viewpoints across programs and developed a set of guidelines aimed at improving student attainment, engagement, and attendance. As the project lead and School Continuation Lead, I am pleased to share the outcomes and guidance at the conference with the aim of enhancing student learning and engagement.

15:30-15:55
100305 | *A Not So Ordinary Approach to Ordinary Differential Equations: Evaluating the Effectiveness of "CLEAR" in Enhancing Learning*
Hansong Xue, Singapore University of Technology and Design, Singapore
Stephen Tay, National University of Singapore, Singapore

Teaching ordinary differential equations (ODEs), while essential, is often challenging due to the abstract nature of the topic and students' difficulty in relating it to real-world applications. To address this, the Contextualised Learning via Enquiring, Answering, and Reflecting (CLEAR) approach was implemented to help students connect ODEs with authentic, real-life contexts. CLEAR was introduced during the Fall Semester of AY2024 in the graduate-level course "Applied Mathematics for Engineering" at the Singapore University of Technology and Design. As part of the assignment, students successfully developed nine unique real-world contexts, each leading to the formulation of questions and corresponding solutions involving the application of ODEs. The impact of CLEAR was explored through two guiding questions: (1) Does the CLEAR approach help students relate ODEs to observed phenomena beyond the classroom?; (2) How do students perceive the CLEAR approach? Overall, students demonstrated an enhanced ability to contextualize ODEs and reported a positive learning experience with the CLEAR assignment. Many expressed appreciation for how the approach extended their understanding beyond classroom theory and found the process engaging and enjoyable. These findings offer valuable anecdotal evidence that may inform and enhance future approaches to teaching ODEs. Furthermore, given that the CLEAR approach requires no additional hardware or software, it presents a scalable and cost-effective strategy that can potentially be adopted across a wide range of courses and disciplines.

15:55-16:20
101227 | *Can Remembering Be an Effective Learning Strategy? A Review of Rote Memorization Within the Chinese Context*
Shuk Ling Cheng, The Hong Kong Polytechnic University, Hong Kong

Rote memorization as a learning strategy has been faced with some criticism that encourages passive learning (Biggs, 1997). However, when it comes to the Chinese cultural context, the roles rote memorization can play cannot be simply diminished. The application of rote memorization in learning can be attributed, in part, to the influence of Confucian beliefs regarding education. Chinese ancient education culture promotes the values of recitation (背誦 Beisong), diligent practice and perseverance in learning. It pays attention to 'sound education' which requires students to recite and speak aloud the poems in order to pass on knowledge. Gradually, students these days develop this memorization skill during their childhood as they are asked to recite classical texts. To conduct the study, electronic databases including Scopus and Google Scholar were accessed for the search of peer-reviewed journal articles published between 2015 and 2025. The search terms used were "rote memorization", "vocabulary learning", "text memorization", and "Chinese L2 learners". Only studies that directly addressed rote memorization as a method in L2 acquisition in Chinese context were included in the final review. Rote memorization is found significantly beneficial to Chinese students in their lexical foundation, especially for L2 beginners who do not have enough English linguistic knowledge. Suggestions on the balanced views on its application in foreign language learning, taking into account the Chinese cultural contexts and active learning, will be provided.

16:20-16:45
101026 | *Learning from Mistakes as a Remedy to Rote Learning in Mathematics: Three Case Studies from Nanyang Technological University, Singapore.*
Fedor Duzhin, Nanyang Technological University, Singapore

Mathetical anxiety is a wide-spread phenomenon in the West. It is often even culturally accepted that certain students do not have innate ability to mathematics and they may even be discouraged by their parents from investing their effort to studying mathematics. In Asia, the idea that some students are not gifted in mathematics and hence shouldn't even try studying it is nonsensical. Effort rather than talent is praised. This leads to growth mindset, which is generally a good thing. However, there is an opposite extreme. Effort is encouraged, but it is very often mindless effort that boils down to repetition drills. Students are not comfortable with non-standard questions, with making mistakes, and with learning from their mistakes. According to our experience, this leads to studying for tests rather than for deep understanding. Students with good grades don't remember basic definitions from courses they took 1-2 years ago. We believe that this problem can be somehow remedied by explicitly encouraging students to learn from mistakes. We present three case studies of how this was implemented in our classes of very small (5 students), small (20 students), and very large (850 students) size. Specifically, we will share our learning activities and reflect on what worked and what didn't.

15:05-16:45 | Room 704 (7F)
Thursday Onsite Parallel Session 4
ACE2025 | Education for STEAM
Session Chair: Hye Jin Park

15:05-15:30
97232 | *Chemistry Laboratory Engagement: STEM Students' Perceptions, Confidence, and Career Aspirations*
Paul John Tiangco, National University, Philippines

The growing global demand for STEM professionals highlights the critical role of effective science education in preparing students for future careers. This study investigates the perceptions, attitudes, and motivations of Grade 12 STEM students at NU Fairview, Inc. toward face-to-face chemistry laboratory work. Using a descriptive-correlational design, data were collected from 465 students to examine how laboratory experiences shape their understanding of scientific principles, confidence, and career aspirations. Findings reveal that students view laboratory work as an essential and engaging component of their STEM education, with collaborative activities, instructor support, and real-world relevance serving as key motivators. While students reported high confidence in their laboratory skills, areas such as problem-solving and data interpretation were identified for improvement. Notably, gender did not significantly influence perceptions, but students' STEM specializations (e.g., Allied Health, Engineering) impacted their laboratory performance and engagement. The study also underscores the positive influence of laboratory experiences on career aspirations, though further efforts are needed to foster interest in research-oriented paths. Based on these results, recommendations include enhancing problem-solving and data analysis training, optimizing time allocation for experiments, and tailoring laboratory activities to align with students' specializations. Additionally, promoting research opportunities and maintaining a gender-inclusive environment are suggested to strengthen STEM career readiness. This study contributes to the ongoing discourse on optimizing laboratory-based learning to inspire and equip future STEM professionals.

15:30-15:55
97242 | *Enhancing Student Competitiveness Through Design-Based STEM Activities: Evidence from Secondary Education*
Asma Alshabnuti, Sultan Qaboos University, Oman

In light of rapid technological advancements and a rapidly changing world, there is a need to prepare a generation that can contribute to solving scientific problems and possess the 21st-century skills necessary for success. This study aimed to enhance the academic competitiveness of tenth-grade students by implementing Design-Based STEM activities using 3D design to solve physical problems. The study employed an experimental design with two groups: an experimental group and a control group. The study sample consisted of 111 tenth-grade students, with 55 in the experimental group and 56 in the control group. The intervention, conducted over eight weeks, engaged students in practical challenges aligned with real-world problems, requiring them to apply engineering design processes, prototype solutions, and solve problems using design software and 3D printing technology. Data were collected using the Competitiveness Scale (Eker, 2022). The study results indicated statistically significant differences between the control group and the experimental group, favoring the experimental group in competitiveness, specifically in both perceptions of competition and levels of challenge. These results demonstrate the effectiveness of design-based science, technology, engineering, and mathematics (STEM) activities in fostering a more competitive learning environment. The study concludes with a recommendation on the importance of integrating digital design tools into science, technology, engineering, and mathematics (STEM) education to enhance student engagement, motivation, and future readiness.

15:55-16:20
96534 | *Philosophy of the Sky: Reconnecting Science, Meaning, and Education*
Guilherme Temporao, Pontifical Catholic University of Rio de Janeiro, Brazil
Marcus Reis Pinheiro, Universidade Federal Fluminense, Brazil
Irã Figueiredo Salomão, Pontifical Catholic University of Rio de Janeiro, Brazil
Welles Morgado, Pontifical Catholic University of Rio de Janeiro, Brazil
Edgar Lyra, Pontifical Catholic University of Rio de Janeiro, Brazil

This work presents and reflects on the design, objectives, and initial outcomes of Philosophy of the Sky, a multidisciplinary extension course offered at PUC-Rio, Brazil. The initiative responds to a growing wave of scientific denialism, stemming from the convergence of multiple factors, such as the lack of historical and epistemological context in how science is taught: often presented as a collection of finalized truths, rather than the outcome of centuries of intellectual development. This fosters passive acceptance or disbelief, rather than critical understanding. Structured in four modules—Cosmologies of Ancient Greece, The Copernican Revolution, The Near Sky: Astronomical and Astrological Perspectives, and The Deep Sky: Observing the Origins of the Universe—the program reconnects scientific knowledge with its historical, symbolic, and philosophical roots. This interdisciplinary approach, which integrates Philosophy, Astronomy and Physics, stimulates not only conceptual understanding but also critical reflection and intellectual engagement. The article analyzes the pedagogical rationale behind the course structure, its thematic progression, and the value of combining scientific literacy with symbolic and philosophical inquiry. It also discusses classroom experiences, highlighting how interdisciplinary dialogue can counteract reductive and dogmatic views of science. Ultimately, Philosophy of the Sky aims to move beyond passive transmission of scientific content. By revisiting key paradigm shifts in the history of thought, the course invites students to experience these ruptures—conceptually and existentially—thereby cultivating a deeper, more resilient relationship with scientific knowledge and its role in the human search for meaning: a re-enchantment of science itself.

16:20-16:45
97179 | *Empowering Student Leadership and Community Contribution Through Inclusive, Culturally Responsive STEM Work-Based Learning*
Hye Jin Park, University of Hawaii at Manoa, United States
Kiriko Takahashi, University of Hawaii at Manoa, United States

Preparing a diverse, future-ready STEM workforce requires inclusive strategies that foster student leadership, cultural identity, and a desire to contribute meaningfully to their communities. In the U.S., Indigenous students and students with disabilities often face barriers to accessing high-quality STEM learning. In response, we developed and are evaluating the Hōkūlani–CLD TEAMS model, a strength-based, culturally responsive intervention supporting postsecondary transition and STEM career development for underrepresented students, including Native Hawaiian and Pacific Islander youth with or without disabilities in Hawai'i, the Commonwealth of the Northern Mariana Islands (CNMI), and American Samoa. The program includes five core components: (a) academic enrichment in science, (b) mentoring that connects STEM content to Indigenous cultural practices, (c) college transition support, (d) family engagement, and (e) work-based learning. Participants are primarily first-generation, college-bound high school students. This presentation highlights the work-based learning component, in which students engage in spring internship preparation—including job shadowing, site visits, and skill-building—followed by paid summer internships in STEM fields. With support from local STEM professionals, students gain real-world experience and develop leadership skills through community-based projects. Student reflections revealed stronger commitment to STEM education and careers, along with increased motivation to apply their skills in service of their communities. Many also reported a heightened sense of belonging and support. Findings suggest that inclusive, culturally responsive work-based learning effectively fosters leadership, college readiness, and community-driven aspirations among underrepresented high school students.

15:05-16:45 | Room 705 (7F)
Thursday Onsite Parallel Session 4
ACE2025 | Art and Design in Education
Session Chair: Alma Valendez

15:05-15:30
96070 | *Intercultural Childhood Memory: Sociomaterial Engagements Through Children's Artworks*
Sinyoung Kim, University of Helsinki, Finland
Kristiina Kumpulainen, University of British Columbia, Canada

This study examines how children's memory is (re)constructed through creative engagements with materials in intercultural contexts. Using a sociomaterial framework and art-based methodology, the research focuses on a 15-year-old Mongolian child who moved to Finland in 2022. His transition between cultural environments provides a unique lens for exploring how memory is reconfigured through material encounters. Initial data collected in 2024 included a semi-structured interview and analysis of two artworks, while a follow-up in 2025 investigated a new piece created after his return visit to Mongolia in summer 2024. Visual Network Analysis illustrated the shifting relationships between social and material actors, showing how artworks transform as memory is revisited and reinterpreted across time and place. This dynamic interplay underscores the importance of imagination and material agency in shaping how children process and express memory. The findings demonstrate that children's artworks function as constellations of memory—non-linear, temporally layered, and culturally situated. Materials such as action figures, bones, and things collected spontaneously in nature emerged not merely as tools for artistic expression but as active participants in the construction and transformation of memory. The child's transcultural experience intensified these entanglements and revealed new ways of engaging with memory through creative expression. By tracing these sociomaterial entanglements, the study contributes to educational research by advocating for pedagogies that embrace memory as a relational and imaginative process. This research highlights the importance of valuing children's diverse cultural experiences and the vital role of materials in co-constructing memory and understanding the world around them.

15:30-15:55
No presentation

15:55-16:20
97557 | *BitMorph: Post-Textual Sensory Practice and the Emergence of Material Vocabularies in Contemporary Visual Culture*
Juiyi Yen, National Taiwan University of Arts, Taiwan

This study introduces BitMorph, a project-based workshop exploring how living biological materials—kombucha membranes, mycelium, and medicinal herbs—function as non-linguistic agents in contemporary creative practices. We investigate how post-textual reading and cross-sensory experiences emerge through interaction with nonhuman materials, asking: Can living materials act as symbolic surrogates in contemporary image-making, developing sensory and temporal grammar beyond language? Grounded in theoretical frameworks by Ingold, Barad, and Drucker, BitMorph reframes material instability as a generative site for perceptual activation and creative transformation. The workshop was conducted over six weeks with eighteen graduate creative practitioners, guiding participants through microbial cultivation, fermentation-based image generation, scent-based storytelling, and agar/mycelium semiotic exploration. Participants embraced slowness, failure, and emergent transformation as integral to their process. Three projects are analyzed: (1) Expiring Image Brewing (cyanotype-kombucha hybrids dissolving visual permanence); (2) Herbarium (scent-activated herbal bioplastic book reconstructing cultural memory); and (3) Temporal Stamps (mycelium/agar stamps embedding rhythm and temporality). Findings suggest that by shifting from author to listener, participants formed post-textual sensory grammar rooted in environmental response, somatic awareness, and time-based transformation. Microbial matter functions as a symbolic system, displacing linguistic centrality and fostering new meaning-making modes in visual cultural production. BitMorph contributes to contemporary visual culture discourse by positioning living materials as perceptual mediators and agents of symbolic disruption.

16:20-16:45
97945 | *See It, Write It: Transform Student Writing Through Visual Representation*
Alma Valendez, Cebu Technological University, Philippines

Grounded on the assumption that learning is better facilitated when the learner's affective filter is low, this study looked into the impact of the collage-making process as a tool in developing the composition-writing skills of the students. The study utilized the researcher-made questionnaire and the student outputs as the primary data sources. To ensure the impartiality of data collection, student outputs were rated by two English teachers and the researcher. Data were analyzed using simple percentages and statistical indicators such as mean and standard deviation. The paired t-test was utilized to test for the significance of gain scores between the pre-test and the post-test and the null hypothesis was tested at a 0.05 significance level. The findings revealed a significant gain in scores between the respondents' pretest and post-test scores. Data also showed that students' positive attitude toward the activity, the ideas and concepts generated during the process of creating, and the clarity of ideas and concepts before the writing activity was undertaken helped facilitate the development of the composition writing skills of the students. These findings lead to the conclusion that the collage-making process is an effective strategy for developing the composition writing skills of the students.

15:05-16:45 | Room 707 (7F)
Thursday Onsite Parallel Session 4
ACE2025 | Innovative Technologies in Education
Session Chair: Mei Yee Lee

15:05-15:30
101501 | *When Humans Meet AI: How Group Characteristics Influence Solution Quality*
Galina Shulgina, HSE University, Russia
Alexandra Getman, HSE University, Russia
Ilya Gulenkov, HSE University, Russia

Although collaborative learning has long been recognized as an essential practice in higher education, little is known about how specific group characteristics shape outcomes once artificial intelligence (AI) becomes a co-participant in the collaborative process. Building on Collaborative Learning Theory and Cognitive Load Theory, this research investigates how the configuration of student teams (including their average knowledge level, degree of knowledge diversity, and overall size) affects the quality of solutions produced in AI-supported problem-solving tasks. The research was conducted with 196 undergraduate students in an Economics program. Over the semester, students alternated between conventional group work and activities where ChatGPT was integrated as a co-participant in collaboration. Teams of five to eight members, formed through stratified randomization, engaged in seminar sessions that were later analyzed for solution quality. An expert-designed rubric was used to evaluate the accuracy, depth, and application of economic models in student solutions. Regression analyses showed three key patterns: teams with stronger prior knowledge achieved better results; groups with wider gaps in knowledge among members performed less effectively; and larger groups outperformed smaller ones when collaborating with AI. These findings emphasize that group design is a critical factor for ensuring productive and high-quality outcomes in AI-enhanced collaborative learning settings.

15:30-15:55
97386 | *PBIS-RISE: A GPT-Powered Questionnaire Generator for Assessing Student Understanding of Behavioral Expectations*
Giuseppe Chiazzese, National Research Council of Italy, Italy
Marco Arrigo, National Research Council of Italy, Italy
Antonella Chifari, University of Palermo, Italy

The PBIS-RISE Generator introduces a novel application of generative artificial intelligence (AI) in the domain of behavioral education, specifically within the Positive Behavioral Interventions and Supports (PBIS) framework. While PBIS promotes the development of locally adapted behavioral expectation matrices to foster prosocial conduct (Sugai & Horner, 2002; Lane et al., 2019), a persistent challenge lies in evaluating students' comprehension of these expectations in a standardized yet context-sensitive manner. PBIS-RISE addresses this need by employing a GPT-based model—trained and prompted on PBIS theory, validated behavior matrices, and existing school climate assessments (Horner et al., 2010; Chafouleas et al., 2012)—to generate customized questionnaires. These instruments reflect each school's cultural norms and educational goals while preserving fidelity to the PBIS framework. The generator creates items across six core dimensions: Behavioral Comprehension, Modeling, Generalization, Value Association, Emotional Association, and Meta-Emotional Reflection, thereby aligning with both the cognitive and affective domains of social behavior education (Zins et al., 2004). The RISE acronym—Reflecting on Interactions, Standards, and Expectations—captures the tool's reflective and student-centered design. For educators and school psychologists, PBIS-RISE supports data-driven decision-making, enabling scalable yet individualized behavioral assessments that inform tiered interventions (McIntosh & Goodman, 2016). For teachers, it reduces the burden of developing evaluation tools and enhances consistency in behavior-related assessments. As educational research increasingly explores the integration of AI in formative assessment (Luckin, 2018; Arslan et al., 2024), PBIS-RISE offers a replicable, theory-grounded, and ethically aligned model to support equitable behavioral education in diverse school settings.

15:55-16:20
100905 | *Learning Comes to Life: How Expressive Avatars and Spoken Narration Enhance Student Engagement*
Mei Yee Lee, Monash University Malaysia, Malaysia
Elaine Yin Teng Chew, RMIT University Vietnam, Vietnam

Engaging Gen-Z students effectively requires presentation methods of learning content that enhance understanding, enjoyment and overall satisfaction. In a first-year accounting course, interactive e-learning modules engaged students as consultants in the learning journey to solve real-world challenges. The modules featured vibrant graphics and an animated avatar resembling the course leader with the purpose of providing immediate feedback as students navigated each real-world scenario. This study evaluates the impacts of two enhancements made to the modules: a redesigned avatar with more lifelike facial and body expressions and the integration of spoken narration alongside text. Guided by Clark and Mayer's (2016) personalization and embodiment principles, learners benefit from avatars that can make human-like articulation and gestures, resembling conversation or interaction. The redundancy principle (Clark & Mayer, 2016; Craig et al., 2002) suggests that spoken narration alongside text reinforces comprehension, particularly in complex subjects like accounting. This approach enables students to process both voice and text at a personalized pace, which reduces cognitive load and benefits non-native English speakers. T-tests on survey data collected from 219 students in 2023 and 2024 show statistically significant improvements ($p < 0.01$) in perceptions of the avatar's expressiveness, including facial animation and body movement. Voice attributes such as clarity, intonation, audio quality, and expression scored between 5.95 and 6.78 out of 7 for appropriateness. Notably, ratings related to pleasure and excitement also increased significantly, suggesting that students find the enhanced avatar design and audio-embedded content to be more engaging, immersive, and enjoyable in the virtual learning environment.

Notes

15:05-16:45 | Room 708 (7F)

Thursday Onsite Parallel Session 4

ACE2025 | Educational Policy, Leadership, Management and Administration

Session Chair: Glen Mangali

15:05-15:30
96405 | *The Consolidated Framework for Implementation Research: Application to Education*
William Walters, St. Francis Xavier University, Canada
Wendy Barber, Ontario Tech University, Canada
Mickey Jutras, St. Francis Xavier University, Canada

This study investigated the application of the Consolidated Framework for Implementation (CFIR) in an educational setting. Although education implements numerous interventions and programs at all levels, standardized testing has primarily measured their success. Leaving a paucity of direct measures for non-academic program implementation. Borrowing from an established practice in medicine, the CFIR, which provides a framework divided into five domains and 26 subsuming constructs to identify potential barriers and facilitators to program implementation, is reviewed and investigated for possible use in education. Researchers applied the CFIR to a program intervention implemented at two Canadian university faculties of education focused on an intentionally designed play-based modern instructional strategy (PBMIS) in physical education (PE) focused on equity, disability, inclusion, and accessibility (EDIA). Data sources included video interviews, focus groups, and researcher observations. The complex coding and analysis across the five domains and relevant constructs identified barriers and facilitators for program implementation, along with their relative strengths. The CFIR demonstrated a high level of agreement with a previously published working of the data, suggesting it is possible to disrupt pre-service teachers' previously held notions of EDIA and PBMIS. The CFIR identified several barriers to program implementation, including elements of the teaching practicum, marginalization of PE, and lack of inclusive instructional strategies. Facilitators included the intentionally designed EDIA curriculum, learning opportunities within their faculties, and external organizational support. While complex and time-consuming, the results suggest that the CFIR is a credible tool for measuring the effectiveness of implementing educational initiatives at all system levels.

15:30-15:55
98337 | *Research Methods Used in Future Educational Studies: The Delphi Method as a Model*
Yahya Alharbi, Imam Muhammad Ibn Saud Islamic University, Saudi Arabia

This study aims to provide a focused perspective on the Delphi method, one of the research approaches employed in educational studies that seek to explore future trends. The study addresses the concept of this method, its areas of application, its implementation mechanisms, and the key limitations associated with its use. The study adopts a descriptive documentary approach and reveals several findings, the most prominent of which include: 1. The Delphi method is considered one of the most widely used techniques in future-oriented educational research. It also represents one of the methodological contributions introduced by the American school in the field of futures studies. 2. This research method is characterized by its integration of intuitive, exploratory, and normative approaches into a unified framework aimed at anticipating future educational issues. 3. The Delphi method functions as a survey tool for facilitating discussions among experts through multiple rounds, with the objective of reaching a general consensus among them. 4. The necessity of employing this method becomes evident in certain situations, such as when the research topic requires input from a large number of experts, making direct face-to-face interaction impractical; when there are significant differences of opinion among experts; or when data validity necessitates maintaining participant anonymity for specific considerations. 5. The success of the Delphi method in educational studies that aim to forecast future developments in educational and instructional matters depends largely on the careful selection of the expert panel involved in the research.

15:55-16:20
97219 | *Corporate Sponsored Research Program Linked to Graduate Education*
Yuko Shinzawa, The University of Tokyo, Japan
Yasuyuki Yokono, The University of Tokyo, Japan
Shohei Kawano, The University of Tokyo, Japan
Kenji Hirohata, Toshiba Corporation, Japan
Makoto Masuda, Oki Electric Industry Co., Ltd., Japan
Yuji Suzuki, The University of Tokyo, japan

The WINGS-CFS (World-leading Innovative Graduate Study Program - Co-Designing Future Society) is an integrated master's and doctoral program that promote both high-level expertise and generic competence in human society. This is a cross-disciplinary educational program centered on engineering that spans 12 graduate schools and 45 departments. Students develop high-level expertise and research abilities within each department and laboratory. They also develop generic competence in human society or transferable skills through WINGS-CFS. These skills will help a social implementation of innovative technology to create a better future.
We operate a CFE (Co-Designing Future Engineering) Corporate Sponsored Research Program to enhance education at WINGS-CFS. Through this program, we conduct joint research on individual research topics and explore new joint research themes. CFE Companies can participate in a faculty research forum and a poster presentation where over 200 students introduce their research. They are also involved in graduate education, providing students with an opportunity to learn about social issues and develop transferable skills that cannot be learned only at the university. This is a valuable opportunity for companies to gain insight into R&D for new products by acquiring knowledge of a wide range of university research and current students. Additionally, company members can cultivate leadership skills and broaden their research perspective by interacting with students from various fields, including international students.

15:05-16:45 | Room 708 (7F)

Thursday Onsite Parallel Session 4

ACE2025 | Educational Policy, Leadership, Management and Administration

Session Chair: Glen Mangali

16:20-16:45

100251 | *Applying Driscoll's Reflective Model in Graduate Research Workshops: Enhancing Critical Thinking and Heutagogical Competencies*
Glen Mangali, Marikina Polytechnic College, Philippines

This study explores the role of Driscoll's Reflective Model in enhancing graduate students' critical thinking and heutagogical competencies within a doctoral level research workshop. Grounded in Borton's triadic framework- "What?", "So, what?", and "Now what?"- this qualitative study investigates how structured reflection facilitates deeper learning and self-directed inquiry. Participants engaged in guided reflection activities integrated into an Advanced Research in Educational Management workshop, where they documented insights through reflective journals and group discussion. Data were analyzed using thematic analysis and in-vivo coding techniques to extract emergent patterns in cognitive and metacognitive development. Results indicate that the use of Driscoll's model significantly supports the development of metacognitive awareness, capability-building, and strategic research planning. Participants reported a transformation from compliance-based attitudes toward research into a more autonomous, purposeful, and impact-oriented mindset. Findings also revealed that reflective practice, when scaffolded appropriately, cultivates higher-order thinking and fosters heutagogical learning behaviors such as agency, adaptability, and double-loop learning. This study affirms the pedagogical values of embedding reflective models in graduate education and suggests that such integration can meaningfully contribute to the cultivation of critical scholars capable of navigating complex research environments with independence and intentionality.

Notes

Friday, November 28

Online Parallel Sessions

All times are Japan Standard Time (UTC+9)

Abstracts appear as originally submitted by the author. Any spelling, grammatical, or typographical errors are those of the author.

12:15-13:55 | Live-Stream Room 1
Friday Online Parallel Session 1
ACE2025 | Higher Education
Session Chair: Prince Mensah Osiesi

12:15-12:40
98555 | *Transformative Impact of University-Led Communities of Practice on Working Professionals in Japan: A Text Mining Analysis of Self-Reported Changes*
Sachiko Morita, Utsunomiya University, Japan

This study investigates how participation in a university-led community of practice designed to foster leadership skills influences the attitudes and self-perceptions of working professionals in Japan. Focusing on a program hosted by a national university in Japan between 2019 and 2024, we conducted a questionnaire survey of individuals who had participated in the initiative, collecting 109 valid responses. Among the survey items, one open-ended question asked participants to describe any personal changes they experienced before and after joining the program. These narrative responses were analyzed using KH Coder, a text mining tool for qualitative data. The analysis revealed a range of positive transformations. In addition to acquiring new knowledge, participants reported increased motivation to engage with local communities, a stronger sense of initiative, and meaningful shifts in their professional mindset. These findings suggest that such university-led communities of practice not only support individual development but also contribute to broader regional revitalization. The presentation will further explore the triggers behind these changes and discuss implications for designing and facilitating more effective community-based learning initiatives for working professionals. Furthermore, we will explore the potential role of higher education institutions in contributing to their local communities through such learning communities.

12:40-13:05
97224 | *A Comparative Study on the Identity Construction and Disillusionment of "Good Students" in China and Japan*
Jia Zheng, Teaching Center of Ningbo Open University, China

This study investigates how the identity of "good student" has been constructed, interpreted, and increasingly challenged in China and Japan. Rooted in expectations of academic excellence and social conformity, the "good student" identity has long functioned as a normative benchmark for student success in the two East Asian societies. Yet amid accelerating social change, this identity has become a site of growing student discontent and critical reflection. Based on in-depth interviews with 32 university students in China and Japan, this study explores how macro-level social and cultural forces interact with micro-level student agency to shape the evolving dynamics of the "good student" identity in both countries. Findings reveal that Chinese students tend to define "good students" through standardized academic and behavioral norms, reflecting a highly homogeneous and externally-driven definition mode. By contrast, Japanese students associate the identity more with interpersonal awareness and show greater individual variability in their definitions. These differences reflect distinct socio-cultural influence patterns: China's "Centralized Competition–Explicit Constraint" mode fosters explicit and socially shared reflections on the identity, illustrated by the emergence of the online community "Victims of the 'Good Student Mindset'." In comparison, Japan's "Decentralized Competition–Implicit Constraint" mode is more likely to channel open reflections into silent and individualized adjustment. By examining the "good student" identity as a lens, the study further differentiates modes of collectivism within East Asian societies by tracing how distinct developmental trajectories have shaped China's performance-based collectivism and Japan's relationship-based collectivism, and calls for a research framework that foregrounds intra-East Asian diversity.

13:05-13:30
101512 | *Bridging the Competence Gap in Ugandan Undergraduate Legal Education*
Nagadya Hamidah, Islamic University in Uganda, Uganda

Curriculum design and development are critical for ensuring the quality and relevance of higher education. In Uganda, undergraduate legal education continues to rely on non-competence-based curricula, with each law school independently designing programs which are approved by the National Council for Higher Education and the Law Council. The problem is that, despite Uganda's shift to competence-based curricula at the ordinary secondary level, law schools continue to offer fragmented, theory-oriented programs. As a result, graduates possess strong theoretical knowledge but lack essential professional competencies such as advocacy, legal drafting, ethical reasoning, and client-centered practice. Consequently, law graduates are inadequately prepared for contemporary legal practice, limiting the effectiveness of legal education and Uganda's compliance with the United Nations Sustainable Development Goal 4 (SDG 4) on quality education. The study aims to examine the structure of undergraduate law curricula in Uganda, identify gaps arising from non-competence-based curricula, and propose reforms necessary to establish a competence-based law curriculum aligned with SDG 4. The research questions are: What is the current structure of undergraduate law curricula in Ugandan universities? What gaps arise from non-competence-based curricula? And what reforms are necessary to establish a competence-based curriculum aligned with SDG 4? Guided by an interdisciplinary perspective drawing on educational-theory, sociological-theory, and human capital-theory, the research is qualitative and doctrinal in nature, employing desktop-review of scholarly articles and policy documents. Findings indicate that non-competence-based curricula constrain professional readiness and underscore the urgent need for a harmonized competence-based law curriculum to produce practice-ready.

13:30-13:55
97494 | *Exploring the Conception of Graduateness in Africa: Data from Nigerian Graduates*
Prince Osiesi, Nelson Mandela University, South Africa
Muki Moeng, Nelson Mandela University, South Africa

Research on graduateness and what is expected of graduates in the African context and literature is sparse. For Africa to advance in this Fourth Industrial Revolution Era (4IR), the need for an Africanised conceptualisation of who a graduate is or should be remains essential. This mixed-methods study, underpinned by the Human Capital and the Perry's Intellectual Development theories, explores graduates' perceptions of graduateness and its related attributes. The population of the study comprised of graduates of Nigerian tertiary institutions (universities and polytechnics), who were on their mandatory National Youth Service Corps in Ekiti State, Nigeria. A Sample of 103 graduates were obtained through the multistage sampling procedure. The Graduate Skills and Attributes Questionnaire (GSAQ)(α=0.86) and an interview protocol were used in collecting the study's data, which were analysed using descriptive, inferential statistics, and ATLAS.ti software. Findings indicate that graduateness entails being technically and vocationally educated, skilled and creative. Graduates' attributes and skills encompass self-sufficiency, self-employment, and financial sustainability skills. The most prevalent skill among graduates is the interactive skill. Significant differences in perceived graduate attributes and skills were not found across gender and school types. Factors militating against graduates possessing the globally needed attributes and skills, as well as strategies for enhancing their employability were discussed. The study recommends that the Nigerian higher education curriculum be re-evaluated and adjusted in line with the current trends and demands of the workplace, amongst others.

12:15-13:55 | Live-Stream Room 2

Friday Online Parallel Session 1

ACE2025 | Learning Experiences, Student Learning and Learner Diversity

Session Chair: Jimy Mathew

12:15-12:40
101307 | *Play as a Pedagogical Tool: Enhancing Young Children's Learning in Early Childhood Education*
Ebanna Edison, Dr. B. R. Ambedkar University Delhi, India

The relationship between play and learning has been a widely discussed subject within early childhood education. Samuelsson and Carlsson (2008) argued that in the early years, play and learning were inseparable, conceptualizing the young child as a "playing-learning child" in whom both processes were inherently intertwined. Building on this perspective, the present study examined the blurred boundaries between play and learning in early childhood classrooms and explored how play enriches children's learning experiences. Employing a qualitative case study design, the research was conducted in two Lower Kindergarten (LKG) classrooms in Thiruvananthapuram, Kerala, India, involving 17 students, three teachers, and a principal. The analysis was grounded in Piaget's theory of cognitive constructivism, Dewey's principle of learning by doing, and Vygotsky's socio-cultural theory. Together, these theoretical perspectives provided a comprehensive framework to interpret the educational value of play. The findings of the study generated three key insights. First, play—particularly pretend play—proved to be an effective pedagogical strategy for both introducing new concepts and revisiting previously taught material. Second, children demonstrated the ability to extend their classroom learning into free play, which often resulted in more complex and imaginative forms of play. Finally, play facilitated the sharing of knowledge among peers, thereby fostering collaborative learning and mutual scaffolding. Overall, the study underscores the pedagogical significance of play in early childhood education, highlighting its potential to integrate learning seamlessly into children's everyday activities while promoting agency, creativity, and peer interaction.

12:40-13:05
96845 | *Student Collaboration: A Holistic Framework for Scaffolding Group Activities*
Paolo Ven Paculan, Ateneo de Manila University, Philippines
Desi Dario Magnaye, Ateneo de Manila University, Philippines
Marites Veloso, Ateneo de Manila University, Philippines

Group work is a technique frequently-used by teachers for a variety of competences. But most paradigms of cooperative learning are focused on the product of these activities instead of the process, possibly impacting the quality of the products themselves and failing to acknowledge the value of cooperation as a 21st century skill and a competence to be taught for its own sake. Teacher experiences of implementing long-term group work activities were gathered. This study used the qualitative research design and employed a validated questionnaire. Thematic analysis of the responses explored possible factors that affect how student learning groups succeed or fail to reach their full potential. Results from the study revealed that student collaboration is effective when student agency is maximized, leadership skills are developed, accountability structures are present, and positive peer pressure is leveraged. Despite these, challenges remain in areas such as rubric creation, student engagement, and providing sufficient academic time for coaching and student growth. To address these issues and maximize gains, this research proposes the Student Collaboration Paradigm–a holistic approach to scaffolding group work for long-term projects which explicitly integrates group dynamics, project management, conflict management, effective discussion, metacognitive processes, accountability structures, and student-led decision-making.

13:05-13:30
97782 | *Fostering Inclusive Learning: The Impact of UDL on Student Engagement*
Jimy Mathew, University of Stirling, Ras Al Khaimah, United Arab Emirates
Shanthi Menon, University of Stirling, Ras Al Khaimah, United Arab Emirates
Santhuana Sedhumadhavan, University of Stirling, Ras Al Khaimah, United Arab Emirates

The education sector has evolved significantly over 30 years, expanding participation and creating a more diverse student body (Carasso & Plume, 2023). However, maintaining behavioural, emotional, and cognitive engagement remains challenging due to large cohorts. Students often lose motivation when course content appears irrelevant to their lives. Additionally, varying learning styles and paces make it difficult for educators to cater effectively to all students. Digital distractions from social media and online activities further reduce attention, while stress and anxiety also hinder learning. Addressing these challenges requires innovative teaching strategies, effective technology use, and supportive learning environments to foster engagement. This research explores applying the Universal Design for Learning (UDL) framework with undergraduate and foundation students to create flexible, inclusive environments. UDL principles were implemented in three areas: multiple means of representation (using varied content formats), multiple means of action and expression (allowing diverse ways to demonstrate understanding), and multiple means of engagement (incorporating student interests and offering choice). Findings indicate that classrooms designed with distinct workstations for collaboration, teacher-led instruction, and independent learning foster inclusive, engaging environments. Providing flexibility for students to choose settings that support their learning needs significantly improved engagement. By making learning accessible and relevant, UDL principles enhanced student motivation and participation, contributing to a richer educational experience. The study highlights that addressing diverse learning preferences and fostering autonomy through UDL creates a more engaging and effective learning environment, supporting student success and retention in increasingly diverse higher education settings.

12:15-13:55 | Live-Stream Room 3
Friday Online Parallel Session 1
ACE2025 | Foreign Languages Education and Applied Linguistics
Session Chair: Mariana Alvayero Ricklefs

12:15-12:40
101471 | *An Experimental Design for Investigating Short-Term Effects on Learners' Cognitive Processes Through Multi-Lingual Learning Approach*
Risa Teshigahara, Japan Advanced Institute of Science and Technology (JAIST), Japan
Takashi Hashimoto, Japan Advanced Institute of Science and Technology (JAIST), Japan

Reflecting a time when advances in generative AI and translation tools have raised questions about the necessity of second language learning, attention has turned to the potential of language learning as a form of cognitive training beyond acquiring target-language. This research aims to clarify how second language learning can enhance structural sensitivity, domain-general cognitive disposition that triggers retrieval step of analogical thinking, by bridging literatures of Second Language Acquisition and analogical thinking and examining short-term effects on learner's cognitive disposition to identify structural similarity through multilingual-learning approach. We hypothesis that leaners' noticing to structural similarity activated by priming to identify syntactic relations in both their native and second languages can be applied to other tasks in different domain. Participants are about 30 junior high school students, all native Japanese speakers. The priming task involves identifying modifying and modified phrases and their positions in both Japanese and English sentences, stimulating learners' noticing to similarities in both languages through cross-linguistic mapping. As pre- and post-tests, learners are required to complete the task examining whether noticing different type of relations between two words and their positions within the same context (English learning) influences learners' cognitive dispositions. Given the relation A:B=C:D, learners must identify cause–outcome relationships and recognize the correct order (A causes B → C causes D) and the reaction time is to be measured. If learners more successfully and quickly detect structurally similar pairs among distractors, the hypothesis regarding short-term effects on learner's disposition to identify structural similarity will be verified.

12:40-13:05
96617 | *Students' Note-Taking Patterns and Interpreting Quality: An Empirical Study on a University in Vietnam*
Phuong Do, Diplomatic Academy of Vietnam, Vietnam
Thi Hong Phuong Le, Diplomatic Academy of Vietnam, Vietnam

Within the context of interpreter training and cognitive load theory, this study builds on previous research to explore how note-taking strategies impact interpreting accuracy. The aim is to examine the relationship between note-taking elements including full words, abbreviations, and symbols, and interpreting performance, while also identifying common note-related challenges faced by students. Employing a mixed-methods design, the study involved 49 English-major undergraduates at the Diplomatic Academy of Vietnam. Data were collected through live interpreting tasks, retrospective interview, and an online survey. The study revealed that full-word usage negatively correlated with interpreting accuracy, while abbreviations and symbols showed positive associations. Furthermore, it highlighted challenges such as information overload, unfamiliarity with notation, and disorganized note structures. The results underscore the pedagogical value of strategy-oriented note-taking, suggesting a shift toward more reflective, skill-integrated training in interpreter education.

13:05-13:30
100908 | *Teaching Translation Studies Through Collaborative Student Translation Projects and the LTIK 2025 Workshop: A New Case Study*
Adam Zulawnik, The University of Melbourne, Australia

Speakers of two or more languages, including bilinguals, are often under the impression that proficiency in two or more languages will make them good translators. Translation, and literary translation in particular, requires much more than simply linguistic aptitude. In this presentation, I aim to share my approach for introducing advanced language learners to key theories and methods from the field of Translation Studies. I primarily focus on the most recent literary translation workshop I facilitated as an educator, the Online Korean Literature Translation Workshop 2025. The workshop, which brought together fourteen advanced and heritage learners of the Korean language from Australia and Singapore, was carried out between July and September 2025, with a focus on South Korean author Kim Keum-hee's award-winning collection of short stories 'Urineun pepeoroni eseo wasseo' ('We come from pepperoni') as the source text. In my presentation, I will outline some of the key issues faced by advanced language learners when first faced with literary translation, including over-adherence to source text syntax, over-use of dictionaries (and in recent times, Artificial Intelligence), as well as challenges faced when translating collaboratively in an online environment. I will then share some of the methods I have employed in this year's project, while also contrasting approaches I have trialed in previous workshops (2023). The project is a valuable testament to advanced language learner engagement with literary translation and the Students as Partners (SaP) framework, with potential for further curricular development and integration with Work Integrated Learning (WIL).

13:30-13:55
100274 | *ESL Teachers Working with Dually-identified Students: A Quantitative Case Study*
Mariana Alvayero Ricklefs, Northern Illinois University, United States
Grace Agah, Northern Illinois University, United States

This presentation will report on a quantitative research study (Barlett & Vavrus, 2017; Stockemer, 2019) with English-as-a-second-language (ESL) teachers who work with children dually identified as being ESL learners and as being students with special education needs. The study's purpose was to explore what these teachers' perspectives were and the concomitant opportunities and challenges they experienced for teaching in their classrooms. This empirical study is important as ESL children tend to be mistakenly over-identified as having special education needs or disabilities because language acquisition differences tend to be confused with language disorders (Cavendish et al., 2015; Klingner et al., 2016), and when these children are properly identified as having dyslexia, autism, and behavioral disorders, ESL educators often do not feel appropriately trained to work with these pupils on a daily basis (Umansky et al., 2017; Waitoller & Artilles, 2013). Furthermore, the study used descriptive and inferential statistics to analyze questionnaire-quantitative data (Bandalos, 2018; Hatcher, 2014). The presentation will point to significant results and will address relevant recommendations for ESL teachers and their professional development, and for scholars and future research endeavors.

12:15-13:55 | Live-Stream Room 4
Friday Online Parallel Session 1
ACE2025 | AI in Education
Session Chair: Christopher Shaw

12:15-12:40
96643 | *Exploring the Impact of AI-Generated Feedback Via the AWE System My Access on EFL Students' Writing and Assessment Literacy*
Wei-chi Pan, Wenzao Ursuline University of Languages, Taiwan

This study explores the impact of AI-generated feedback, delivered via the AWE system My Access, on EFL university students' academic writing performance and student writing assessment literacy (SWAL). Using a mixed-methods, quasi-experimental design, 53 first-year students from vocational school backgrounds were assigned to an experimental group (AI feedback) or a control group (teacher feedback). Students completed multiple writing tasks across genres—narrative, comparative, and argumentative essays. Each task began with a handwritten in-class draft, followed by AI feedback and multiple rounds of revision. This process encouraged iterative, reflective engagement with feedback in varied rhetorical contexts. Quantitative data were collected through pre- and post-tests measuring writing performance across six dimensions and SWAL across four subscales: knowledge, beliefs, behavior, and critique (Xu, Zheng, & Braund, 2023). ANCOVA results showed no significant post-test writing differences between groups, suggesting AI-generated feedback performed comparably to teacher feedback. However, only the experimental group showed statistically significant improvement from pre- to post-test, indicating sustained development. To assess SWAL outcomes, a MANCOVA was conducted controlling for pretest scores. Results revealed a significant multivariate group effect, Wilks' Lambda = .620, $F(4, 44) = 6.743$, $p < .001$, partial $\eta^2 = .380$. Univariate ANCOVAs showed the experimental group significantly outperformed the control group on the behavior subscale, $F(1, 47) = 21.279$, $p < .001$, partial $\eta^2 = .312$, with a marginal difference in knowledge. No differences were found for beliefs or critique. Qualitative reflections indicated increased self-awareness, strategy use, and critical engagement, suggesting AI feedback fosters behavioral engagement and metacognitive growth.

12:40-13:05
100503 | *Augmenting AI Literacy in Bachelor of Science in Information Technology Using the TPACK and SAMR Frameworks*
Mark Teddy Quiban, Universidad de Dagupan, Philippines
Jann Alfred Quinto, Universidad de Dagupan, Philippines

This study aimed to enhance the AI literacy of first-year Bachelor of Science in Information Technology (BSIT) students through structured intervention using Generative AI tools guided by the TPACK (Technological Pedagogical Content Knowledge) and SAMR (Substitution, Augmentation, Modification, Redefinition) frameworks. The study focused on first-year students' foundational exposure to Artificial Intelligence. The BSIT program is critical in shaping readiness for future coursework and professional environments by increasing AI technologies. Early intervention also promotes responsible AI use, digital ethics, and critical thinking at the onset of their academic journey. Thus, an experimental one-group pre-test and post-test design was utilized. A validated AI literacy assessment tool was administered to 45 first-year BSIT students before and after the intervention. The intervention included hands-on AI activities, exercises using GenAI tools, and reflective discussions on ethical and practical implications of AI use. Paired sample t-test determined whether there was a statistically significant improvement in students' AI literacy scores. Results revealed a significant increase in the post-test scores ($p < 0.05$), indicating that the integration of GenAI tools for augmentation, when supported by appropriate pedagogical frameworks, positively impacted students' understanding and application of AI concepts. This implies that embedding AI literacy early in the BSIT curriculum fosters long-term competence in navigating AI-driven environments and supports the development of future-ready IT professionals.

13:05-13:30
101451 | *Teaching with Generative AI in All-Out Defense Education: A Cross-Theoretical Study on Teacher Agency and Pedagogical Competency Development*
Juo-Ku Tseng, National Taiwan Normal University, Taiwan

This study investigates the pedagogical application of Generative Artificial Intelligence (Generative AI) in Taiwan's All-Out Defense Education, with a particular focus on how teachers exercise their agency in value-laden and policy-driven curricular contexts. Employing a mixed-methods approach, the research collected 135 valid survey responses and conducted narrative interviews with 10 certified instructors. Drawing from Emirbayer and Mische's theory of agency, the TPACK framework, and the UTAUT2 model, the study constructs a cross-theoretical framework for analyzing AI-supported instruction. Findings indicate that teachers generally adopt a "supportive but not dependent" approach to AI integration, revealing a strategic transition from experiential reliance to contextual adaptation and forward-looking innovation. The study further proposes a four-dimensional pedagogical competency matrix—comprising Teaching Agency, TPACK, UTAUT2, and AI Ethics—and puts forward policy recommendations, including the development of AI curriculum integration guidelines, modularized teacher training programs, and the establishment of regional AI support centers. This study not only addresses the practical and governance challenges of educational transformation but also expands the theoretical applicability of TPACK and UTAUT2, particularly in ethics-oriented and civic-value-driven educational settings.

13:30-13:55
101161 | *Reimagining Film Production Design: Fostering Imaginative Thinking Through AI and Emerging Technologies*
Christopher Shaw, University of the Arts Singapore, Singapore

This paper presents a pedagogical framework that integrates traditional production design principles with AI and emerging technologies to nurture creativity and innovation in higher education. Grounded in the 12 Principles of Production Design, these principles are organised into five themes: Aesthetic Development, Contextual World-Building, Construction and Collaboration, Technology and Innovation, and Environmental & Ethical Responsibilities. These are approached through six indicators of Creative Imagination: Exploration, Elaboration, Novelty, Productivity, Sensibility, and Concentration, providing students with structured opportunities to challenge assumptions, test possibilities, and expand their conceptual processes. The framework combines script analysis, diorama miniatures, and AI-enhanced tools to bridge theory and practice within film, television, games, and animation education. Students use dioramas as tangible representations of narrative cues, later augmented through AI to experiment with lighting, style, texture, and spatial storytelling. Findings suggest that this hybrid approach strengthens imaginative thinking, fosters reflective decision-making, and deepens understanding of design principles across the five themes. AI acted to augment the students' creativity rather than a substitute, supporting rapid prototyping, diverse "what-if" scenarios, and sustainable practices by reducing material waste. It also broadened access, enabling students of varied technical abilities to contribute meaningfully to collaborative projects. Case studies demonstrate how this framework prepared Film and Animation students to create narratively coherent environments, critically evaluate outcomes, and gain confidence in navigating future-facing production pipelines. Ultimately, the study shows how blending theory, imagination, and technology cultivates designers who are both creatively and technologically fluent.

12:15-13:55 | Live-Stream Room 5
Friday Online Parallel Session 1
ACE2025 | Innovative Technologies in Education
Session Chair: Joyce Hwee Ling Koh

12:15-12:40
97458 | *Development of an Experiential Learning Curriculum in Smart Agriculture Using an IoT Based Smart Farm Platform Based on Constructionism*
Sirimonpak Suwannakhun, King Mongkut's University of Technology Thonburi, Thailand
Sakesun Yampinij, King Mongkut's University of Technology Thonburi, Thailand
Pasapitch Chujai Michel, King Mongkut's University of Technology Thonburi, Thailand
Sirawit Chaihang, King Mongkut's University of Technology Thonburi, Thailand

This research aimed to develop a learning curriculum along with competency-enhancing activities for students in the field of Smart Agriculture by using a smart farm platform integrated with Internet of Things (IoT) technology. The objective was to promote experiential learning that emphasizes hands-on practice. Learners participated in the design, control, and development of smart farming systems within real-world contexts, using the technological platform as a learning tool for problem solving. The conceptual framework of the project was based on Constructionism, which emphasizes learning through making, setting personal goals, and constructing knowledge through direct experience. The effectiveness of the IoT-based smart farm technology platform was tested with 25 students. The findings showed that: (1) the average satisfaction score regarding the content of the developed platform was 4.24 (SD = 0.42), and (2) the perceived usefulness and usability score was 4.53 (SD = 0.50). These results indicate that the media successfully enhanced learners' analytical thinking, problem-solving skills, and the ability to apply technology appropriately to local contexts. Furthermore, students were able to develop smart farm projects that address the needs of modern agriculture, acquire essential 21st century learning skills, and effectively integrate knowledge to create sustainable innovations within their own communities.

12:40-13:05
97005 | *Advancing Smartphone Sensor Integration: A Case Study Uncovering Professional Development Needs for Transformative Science Teaching in Resource-Constrained Environments*
Rafael Baynosa, University of San Carlos, Philippines
Monell John Cañizares, University of San Carlos, Philippines

This qualitative case study examines three Filipino physics teachers' perspectives on integrating smartphone sensors into lab instruction, framed by Mezirow's Transformative Learning Theory (TLT). Despite urban/rural contextual differences, teachers unanimously identified sensor accuracy, student access disparities, and inadequate training as key challenges. Notably, these concerns functioned not as barriers but as triggers for critical reflection—aligning with TLT's disorientation phase—prompting openness to pedagogical change when supported by structured professional development (PD). The findings reveal a paradox: while teachers acknowledged smartphone sensors' potential, their transformative adoption hinges on PD that (1) provides hands-on sensor calibration training, (2) addresses equity in student access, and (3) fosters peer mentoring to bridge isolation in resource-constrained schools. The study highlights systemic gaps, such as curriculum-PD misalignment and the digital divide, that hinder innovation. Though limited by its small sample, the study underscores that teacher transformation depends less on geography than on institutional support. Practical recommendations include policy interventions to subsidize devices, redesign PD to model sensor-based inquiry, and leverage teacher communities for sustainable implementation. By centering teacher agency, this research redefines "resource constraints" as a starting point for co-designed solutions rather than a fixed limitation.

13:05-13:30
100934 | *Parallax of Heritage: Intersecting Deep Learning, VR, and Cultural Narratives for Preservation*
Suroyo Suroyo, Riau University, Indonesia
Hambali Hambali, Universitas Riau, Indonesia
Yuliantoro Yuliantoro, Universitas Riau, Indonesia
Yanuar Al Fiqri, Universitas Riau, Indonesia
Mujiono Mujiono, Universitas Riau, Indonesia

The preservation of cultural heritage is vital for fostering national identity and educational development. Despite its importance, traditional preservation methods often struggle to capture the interest of younger generations. Unfortunately, previous studies which addressed a significant gap in the literature by exploring the intersection of Deep Learning (DL) and Virtual Reality (VR) as innovative tools for cultural heritage education, specifically among high school students are still limited. The primary objectives were to investigate the effectiveness of a DL and VR-based approach in enhancing students' knowledge of cultural heritage and to assess its impact on their interest and engagement. An experimental study was conducted at 18 High School in Pekanbaru, Riau, Indonesia, involving a purposive sample of 72 students. The participants, comprising 40 females (55.6%) and 32 males (44.4%), were proportionally selected across three age groups: 14-15 (Grade 9), 16-17 (Grade 11), and 17-18 (Grade 12). The key findings indicate that the integrated DL and VR approach significantly improved students' cultural heritage knowledge ($p<0.01$). Furthermore, this method demonstrably increased students' interest and engagement in cultural heritage preservation by a remarkable 87.5%. These results highlight the transformative potential of combining these advanced technologies to revolutionize cultural heritage education. The study's implications suggest that integrating technology-enhanced methodologies into preservation curricula can substantially boost student engagement and knowledge retention. Future research is needed to explore the scalability and adaptability of this approach in various educational contexts.

13:30-13:55
98126 | *University Lecturers' Use of Learning Analytics from Virtual Learning Environments: A Systematic Literature Review*
Joyce Hwee Ling Koh, University of Waikato, New Zealand
Pei Jun See, University of Otago, New Zealand

In the age of artificial intelligence, learning analytics from online activities conducted through virtual learning environments is a powerful tool that can enhance university lecturers' ability to improve student learning engagement and performance through big data approaches. However, few universities have established institutional policies for the deployment of learning analytics. Consequently, there is also little understanding of how lecturers actually make use of learning analytics and whether their approaches are effective. Using a PRIMSA process, this systematic literature review identified 43 peer-reviewed journal articles published since 2002 that outlined university lecturers' use of learning analytics in actual online learning activities. Through content analysis of the articles, the findings indicate that university lecturers most often made use of learning analytics to track student engagement in basic aspects such as their frequency of access. The use of big-data approaches to model student learning patterns, develop prediction models, and formulate performance improvement interventions remains unfamiliar to lecturers. This presentation examines the gaps in university lecturers' current learning analytics practices, explores the learning analytics competencies needed, and discusses implications for higher education.

12:15-13:55 | Live-Stream Room 6
Friday Online Parallel Session 1
ACE2025 | Intercultural and International Education
Session Chair: Amin Zaini

12:15-12:40
97599 | *Letterpress, Perception, and the Screen Generation: Materiality as Pedagogical Insight in Cross-Cultural Design Education*
Li Yunyun, National Taiwan University of Arts, Taiwan

This study examines how embodied engagement with letterpress printing deepens perceptual understanding of typography and visual culture among digital-native learners. Following the pandemic, in 2023, I collaborated with Tokyo-based letterpress studio Letterpress Letters to organize a cross-cultural workshop for Taiwanese high school students, providing direct experience with European typographic craftsmanship and printing techniques. Addressing a generation increasingly distanced from typography's material and historical foundations, this research investigates how tactile printing practices can reconstruct students' perceptual engagement with typographic forms and foster critical reflection on materiality within contemporary visual culture. Drawing on Tim Ingold's material engagement theory, Karen Barad's concept of embodied intra-action, and sensory learning frameworks, this study employs qualitative methods including participant observation, artifact analysis, and reflective documentation. Through guided instruction in manual type selection, arrangement, and layout adjustment, students developed heightened aesthetic sensitivity and nuanced understanding of the relationship between traditional craft practices and digital technologies. Findings demonstrate that letterpress printing enhances students' capacity for typographic discernment while fostering critical engagement with the visual structures and communicative logic underlying typographic forms. The research reveals how material engagement with printing processes enables students to perceive typography not merely as visual information but as culturally embedded practice. This study proposes a pedagogical framework integrating embodied perception, cultural awareness, and digital literacy as an effective approach to contemporary visual culture education.

12:40-13:05
100263 | *Cultivating Sḵwx̱wú7mesh Wisdom and Inner Power in a World of Precarity*
Denise Findlay, Simon Fraser University, Canada

This presentation explores mainstream education as largely remaining focused on desacralized, disembodied, and emotionally-disconnecting knowledge acquisition that purports to develop intellect and skills. Such education fails to equip educators and students with the capacity necessary to navigate an increasingly complex and precarious world. I make the case that existence is, by nature, precarious and that by losing the sense of the existential sacredness that my *Sḵwx̱wú7mesh* (Coast Salish Indigenous Peoples of British Columbia, Canada) of ancestors had, over time, our relationship with precarity has shifted, leading to an often-unconscious pathological drive towards domination over others with violent consequences. Calls for systemic transformation in reconciliation, anti-racism, decolonization, indigenization, and equity, diversity, and inclusion across many fields of practice, including education, require holistic approaches to educator development and cultivation of the human being: body, mind, heart, and spirit. This presentation engages personal storytelling and theory, identifying the current global dilemma as having deep, hidden ontological roots that must be made visible and critiqued for their ethical implications. By encouraging a turn inward and holistic development of the human, learner, and educator, I challenge educational approaches that focus predominantly on external material conditions. By reflecting on my life-long journey, I contribute to the current resurgence of *Sḵwx̱wú7mesh* wisdom. Wisdom traditions, I assert, can guide whole-person cultivation of ethical-relational ways of knowing and being.

13:05-13:30
97309 | *Western Students' Experiences of Social Hierarchies in Intercultural Interactions in Study Abroad in Japan*
Naomi Tsunematsu, Hiroshima University, Japan

This study investigated Western exchange students' experiences of social hierarchies in study abroad in Japan, using a qualitative research method. Voices of Western students studying in Japan have been invisible in previous research, and their intercultural challenges in coping with Japanese cultural norms have not been sufficiently examined. More qualitative research is needed to understand international students' linguistic, behavioral, and social challenges specific to Japanese society. This study fills this gap by investigating the voices of exchange students from North America, Europe, and Oceania regarding how they coped with the concept of social hierarchy in Japan. Students' narratives revealed that Western students had limited situated learning experiences in Japan, and most of them felt unfamiliar with this concept. They have developed various attitudes towards the social hierarchy concept without actual experience in real-life contexts. Japanese language is closely related to relationally defined selves based on social hierarchies, which could shatter Western students' assumptions about their core identities. While some students had cultural dilemmas and internal conflicts with the influence of social hierarchies on their identities and agency freedom, others developed positive attitudes towards the concept. The study also revealed that Western exchange students had strong aspirations to acquire Japanese language proficiency with cultural understanding, exploring the possibilities of developing careers related to Japan. The findings suggest that intercultural educators' guidance in understanding cultural norms through experiential learning and reflective practices is crucial for students studying in a culturally distant host society. This could transform international students' future relationship with Japan.

13:30-13:55
97358 | *Critical Engagement with Mis/disinformation Through Ambivalent Reading: A Critical Literacy Approach to Intercultural Education*
Amin Zaini, The University of Melbourne, Australia

While the central aim of critical literacy is to challenge power relations within texts for the sake of social justice (Janks, 2010), in our modern, diverse societies laden with mis/disinformation, this aim is fading as systemic inequalities gain the upper hand (Zhao et al., 2021). This paper, by highlighting the increasing and systemic nature of mis/disinformation, argues that we need new approaches to equip students to critically engage with mis/disinformation. To this end, data were obtained from a collective case study conducted at an Australian university involving four international students reading political and national texts. The participants also partook in focus group discussions and individual interviews. The data were thematically analysed to examine how dis/misinformation makes its way through text. Drawing on the concept of ambivalent reading (Zaini, 2022), the paper highlights the value of engaging with contradictory meanings, diverse viewpoints, and cultural tensions as a form of productive critical engagement. Rather than seeking closure or resolution, ambivalent reading encourages readers to approach texts as contested sites of meaning shaped by history, discourse, and power (Fairclough, 2013), where mis/disinformation circulates. The findings also suggest how texts can be interpreted and problematised more effectively to challenge entrenched systems of inequality that produce mis/disinformation. The paper positions ambivalence as a powerful pedagogical tool that fosters critical awareness and can be employed to engage with mis/disinformation. Cultivating this mode of engagement, particularly within intercultural education, is essential for disrupting normalised injustices and advancing equity.

12:15-13:55 | Live-Stream Room 7

Friday Online Parallel Session 1

ACE2025 | Professional Training, Development and Concerns in Education

Session Chair: Priya Ganapathi

12:15-12:40
95697 | *Academic Experiences of Teachers as Graduate Students: Basis for a Proposed Graduate School Development Plan*
Hannah Grace Lumahan, Philippine Normal University, Philippines
Jose Jr. Ocampo, Philippine Normal University, Philippines

This study identified the academic experiences of graduate students who are also full-time teachers. The phenomenological research design was used in this study to fully understand their experiences and interpret the themes that arose from the qualitative data that were gathered through individual interviews and focus group discussions. Using purposive sampling, participants were selected from the different programs in the graduate school of a Higher Education Institution (HEI) in the Philippines, both Master's and Doctorate degrees with a total of forty-two (42) participants across programs. Based on the findings, plans for the enhancement of the Graduate School Development Program were proposed. The findings of this study are important to inform and guide the HEIs and the education department on future innovations and further studies toward policy recommendations.

12:40-13:05
96346 | *Job Satisfaction and Subjective Well-being: A Serial Mediation Model of Resilience and Meaningful Work Among Educational Professionals*
Hureen Siddiqui, Dr. B. R. Ambedkar Open University, India
Majid Sadeeq, University of Kashmir, India
Mohammad Siddiqui, Maulana Azad National Urdu University, India
G Sunanda, Dr. B. R. Ambedkar Open University, India

While teaching is a noble profession, it brings challenges that require teachers to protect their well-being to contribute productively to the field. Although previous research has explored teachers' well-being, the interplay between job satisfaction, resilience, and meaningful work concerning teachers' well-being is scarcely studied. Our research addresses this gap and analyses the direct and indirect relationships between these variables. We administered the Teacher Job Satisfaction Scale (Pepe et al., 2017), the Teacher Subjective Wellbeing Questionnaire (Renshaw, 2015), the CD-RISC-2 (Vaishnavi et al., 2007), and the Work and Meaning Inventory (Steger et al., 2012) to 218 Indian educational professionals, ranging from school teachers to university professors. The Hayes Process Macro Model 6 for serial mediation was analysed using SPSS (v.26). The results for direct relationships were significant for job satisfaction, resilience, work meaning, and subjective well-being. However, the indirect effect of job satisfaction on subjective well-being through resilience was insignificant, while the indirect effect of job satisfaction on subjective well-being through work and meaning was significant. Notably, the serial indirect effect of job satisfaction on subjective well-being through resilience and work meaning was also significant, demonstrating partial, complementary serial mediation of resilience and work meaning in the relationship between job satisfaction and subjective well-being. Considering the findings, educational institutions can conduct resilience-building programmes to enhance stress management, coping strategies, and mindfulness among educators. In addition, educators' sense of purpose can also be strengthened by aligning their professional growth with ethics and values, further fostering collaborative working environments at all educational tiers.

13:05-13:30
97000 | *A Reflective Journey: Novice Science Teacher's Assessment Practices and Challenges*
Odessa Aberilla, University of San Carlos, Philippines
Monell John Cañizares, University of San Carlos, Philippines

This qualitative case study explores the assessment challenges faced by a novice Filipino high school science teacher (pseudonym: Teacher Jen) within systemic constraints. Using reflexive thematic analysis of semi-structured interviews, the study reveals how resource disparities, curriculum misalignments, and standardized testing pressures shape assessment practices. Key findings highlight a critical disconnect: region-made exams (e.g., RUQA) emphasize recall-based questions, conditioning students to prioritize memorization over higher-order thinking. This misalignment is exacerbated by heavy teacher workloads and minimal collaboration in assessment design, limiting opportunities for competency-based evaluations. Notably, students in different academic tracks struggled with critical-thinking assessments, suggesting that uniform testing fails to address diverse learning needs. Teacher Jen's experiences underscore systemic barriers but also reveal adaptive strategies, such as differentiated assessment approaches. However, without structural support, such efforts remain inconsistent. The study advocates for reforms that (1) align assessments with authentic, competency-based learning, (2) reduce reliance on memorization-driven tests, and (3) foster teacher collaboration through professional learning communities. These changes must address equity—recognizing varied student contexts rather than imposing one-size-fits-all evaluations. While Teacher Jen's resilience highlights individual adaptability, systemic solutions are crucial for sustainable improvement in Philippine science education.

13:30-13:55
101201 | *Designing for Engagement: Exploring Task Workload and Interaction in an Online Professional Development Course for Teachers*
Priya Ganapathi, MGIEP - UNESCO, India
Daevesh Singh, MGIEP - UNESCO, India
Navneet Kaur, MGIEP - UNESCO, India
Shitanshu Mishra, MGIEP - UNESCO, India

This paper investigates the task workload experienced by teachers in an online professional development course, analyzed through the lens of Moore's Theory of Interaction. The study examines how different forms of interaction—learner-content, learner-instructor, learner-learner, and learner-interface—shape teachers' perceptions of workload. The course, hosted on the FramerSpace platform of UNESCO MGIEP, was introduced through an in-person orientation workshop that familiarized participants with registration, login, and navigation procedures. Teachers completed the NASA-TLX questionnaire at the beginning and end of the course, defining the task as the completion of all modules leading to certification. To complement quantitative data, unstructured interviews with selected participants provided qualitative insights into perceived workload, challenges, and suggestions for improvement. Findings from the NASA-TLX revealed that teachers experienced substantial workload across several dimensions, including high mental effort, physical interaction, temporal pressure, and emotional strain. These results highlight the significant influence of course structure, task complexity, and interface usability on teacher engagement in digital professional development contexts. Interviews further revealed that repetitive tasks, limited navigational clarity, and rigid pacing heightened cognitive and emotional load, while clear feedback, accessible support, and streamlined design enhanced motivation and persistence. The study underscores the critical role of interaction design in managing workload and sustaining engagement. Recommendations include simplifying navigation, streamlining user interactions, offering flexible pacing, embedding in-context guidance, providing immediate feedback, ensuring transparent support, and adopting microlearning principles. Collectively, these design strategies can optimize digital learning environments to align with teachers' professional realities and provide meaningful engagement in online professional development.

Notes

14:05-15:45 | Live-Stream Room 1

Friday Online Parallel Session 2

ACE2025 | Higher Education

Session Chair: Michael Barr

14:05-14:30

97667 | *Preference and Attitude of Graduate Students on Teaching-learning Modality*
Brylene Ann Baquiran, Universidad de Dagupan, Philippines
Raquel Pambid, Universidad de Dagupan, Philippines
Mark Denice Baquiran, Universidad de Dagupan, Philippines

The changing mode of teaching in the graduate school developed an attitude in students about teaching-learning modalities. This study determined the preferences and attitude of the first-year graduate students of Universidad de Dagupan for the purpose of full implementation of face-to-face modality from CHED. The profile of the students; gadgets used; preference and attitude toward teaching-learning modality; relationship between variables and factors affecting preferences of modalities are described. This descriptive study showed that majority of graduate students are female, age 26-31 years old, use Android mobile phone and laptop for teaching-learning. They prefer online- interaction modality rather than classroom learning (Face to face). The graduate students who prefer digital learning methods highly trust online interactions (google classroom, messenger, Chat Box, AI, Facebook) since they are flexible, convenient, and can support internet-based research. There is a strong association between age and blended learning, meaning young teachers prefer online interactions and blended learning than face to face modality. The teachers who prefer online and blended learning usually use android mobile phone and laptop for teaching and learning. The graduate students highly agree that blended learning is enjoyable, challenging and flexible; e-learning like internet-based research supports traditional teaching- learning while classroom learning promotes socialization and lecture. This study suggest that online interaction and blended learning is adaptable to graduate students while face-to-face is to be used sparingly for examination and special lectures.

14:30-14:55

101312 | *Investigating Neoliberalism and Entrepreneurship in Cross-border Higher Education: A Case Study of an English-Medium Sino-US Program*
Guoxiong Qiu, The Hong Kong Polytechnic University, Hong Kong

Higher education internationalization, featuring cross-border partnership, the adoption of English-medium instruction (EMI), and internationalized curricula, is high on the agenda in many non-Anglophone countries (Galloway & Ruegg, 2020), including China. However, the effectiveness of EMI in China has not been corroborated by sufficient empirical studies (Hu, 2021). Also, little research has attended to the neoliberalist motivations behind the proliferation of EMI and Western teaching practices in East Asia (Block, 2022; Mok, 2007). This study investigated whether and how neoliberal ideology affected a Sino-US EMI program in China. The conceptual lens adopted in the study is entrepreneurship (De Costa et al., 2019; Holborow, 2012), a key construct that dissects institutions' reflexivity in neoliberal competition and their constant self-improvement attempts (e.g., adopting EMI) to compete with others. The neoliberal motivations for competitiveness may result in outcomes that often diverge from stakeholders' rosy visions. The research questions of this study were: 1. How was entrepreneurship enacted on the program level within the Chinese EMI program? 2. What are the tensions between the program's entrepreneurial expectations and reality? Using data from program documents, semi-structured interviews, class observations, and artifacts, the case study revealed that the program's entrepreneurship was manifested in its uncritical adoption of EMI and an American curriculum to strengthen its market competitiveness. This led to a lack of localized and student-centered curriculum, students' academic challenges, and simplified curricular content and assessments in the program, suggesting that there are often considerable misalignments between stakeholders' entrepreneurial visions and reality.

14:55-15:20

101127 | *Collaborative Governance in Transnational Higher Education: Reimagining Leadership Through UK-UAE Partnerships*
Sumara Khan, Brunei University, United Kingdom

Transnational education (TNE) partnerships require innovative leadership models that transcend traditional hierarchical structures and national boundaries. This research addresses critical governance challenges in cross-border higher education by developing a collaborative framework for quality assurance between UK and UAE institutions. Current TNE models often perpetuate power imbalances, limiting effective stakeholder engagement and sustainable educational outcomes. Drawing on Collaborative Governance Theory, Stakeholder Theory, and Agency Theory, this comparative study examines how educational leadership can be reconceptualised through shared decision-making, equitable power distribution, and inclusive stakeholder participation. The research employs qualitative methodology, conducting semi-structured interviews with TNE stakeholders across institutional hierarchies to explore regulatory reconciliation, stakeholder voices, and digital delivery mechanisms. Key findings reveal that effective TNE governance requires moving beyond principal-agent relationships toward collaborative structures that integrate diverse stakeholder perspectives. The proposed framework demonstrates how policy coherence, structural clarity, and participatory engagement can scaffold distributed leadership approaches. Power negotiation emerges as both a catalyst and challenge, necessitating transparent dialogue and mutual accountability between home and host institutions. The study contributes to reimagining educational leadership as influence and practice rather than formal positions, offering practical guidance for developing equitable transnational partnerships. This framework has implications for international higher education policy, institutional management, and cross-border quality assurance mechanisms, promoting sustainable collaboration that benefits all stakeholders while maintaining academic standards in an increasingly globalised educational landscape.

14:05-15:45 | Live-Stream Room 1

Friday Online Parallel Session 2

ACE2025 | Higher Education

Session Chair: Michael Barr

15:20-15:45

97317 | *Bridging Borders: Enhancing Presentation and Communication Skills Through International Collaboration*

Michael Barr, Kyoto University of Foreign Studies, Japan
Yi-Hung Cathy Liao, National Pingtung University, Taiwan

This multinational presentation showcases an innovative collaboration between Japanese and Taiwanese undergraduate students, specifically constructed to encourage global academic communication skills through English. Over several weeks of the semester, students from both countries worked in mixed-nationality groups, supported by coordinated faculty guidance and support. To help organize the project, students accessed a specially-designed master Google Sheet that included information, links, and relevant supporting documents. This centralized hub helped students stay organized and independent throughout the project. Communication between students occurred via moderated LINE OpenChat groups, which provided privacy, structure, and flexibility for meaningful intercultural engagement. The capstone project involved creating Pecha Kucha presentations (20 slides x 20 seconds) on topics related to global issues. Taiwanese students gave their group presentations live in a synchronous forum, while Japanese students produced asynchronous narrated Google Slides presentations. All cohorts provided valuable feedback and participation with peers' content, further enriching their intercultural exchange. The project increased student confidence, presentation skills, and intercultural communicative abilities. Students also developed new technical skills by way of online collaboration, media tools, and digital literacy. Importantly, the project offered many students their first meaningful experience working with international peers in English. This case study demonstrates the potential of international project-based learning to develop global awareness for undergraduate students. Our session will share key pedagogical strategies used to scaffold the project, address challenges such as differing academic calendars and technological readiness, and offer adaptable solutions for educators seeking to implement similar intercultural projects in their own teaching practice.

14:05-15:45 | Live-Stream Room 2

Friday Online Parallel Session 2

ACE2025 | Curriculum Development and Educational Leadership

Session Chair: Saad Bakry

14:05-14:30

101381 | *The Development of a Multi-Curriculum Learning Program in High School on the Example by Kazakhstani High Schools*
Artur Zhussupov, MSDC Math Learning Center, Kazakhstan
Shakarim Muratov, MSDC Math Learning Center, Kazakhstan
Olzhas Pashimov, MSDC Math Learning Center, Kazakhstan

In Kazakhstan, the majority of public schools operate focusing on the national curriculum and are not able to prepare high school students for admission to major international universities. This paper evaluates the development and implementation of multi-curriculum learning programs in selected state and private schools located in major cities of Kazakhstan. Such programs are designed to prepare students for both local and international university admission requirements without additional costs to their families. The research analyzes several of these models in terms of their effectiveness, innovation, and potential for improvement and scaling up. The study employs a mixed-methods approach, integrating quantitative and qualitative data. A comprehensive survey was administered to 98 students and 17 teachers across 13 high schools in Kazakhstan (both private and public). Additionally, semi-structured interviews were conducted with 13 head teachers to gain deeper insights into the program's benefits and challenges. Collected data indicates that the implementation of the multi-curriculum program not only had led to significant improvements in student critical thinking skills but was the reason for notable increase in both national and international standardized test results. Moreover, the study also identifies key challenges, such as the need for additional teacher training, curriculum design, and the development of new grading approaches. The final conclusion is that a multi-curriculum learning program has significant potential for improving secondary education and providing a deeper individualization of the educational process. While various implementation challenges exist, the observed schools demonstrated capacity to foster a more holistic and engaging learning environment.

14:30-14:55

97240 | *From Fragmentation to System: A Historical and Policy Analysis of the Four-Phase Evolution of Citizenship Education in Italy (1958–2019)*
Bei Zhao, Okayama University, Japan

In the context of globalization, migration, and digital transformation, the concept of citizenship has been redefined, necessitating educational systems that foster democratic values and civic responsibility. Based on historical document analysis of key laws and policy documents of citizenship education in Italy from 1958 to 2019, this study identifies four major policy phases. Initially introduced under Aldo Moro in 1958 as a moral initiative amid ideological divisions, citizenship education faced interruptions due to political instability and limited institutional support. Between 1979 and 2007, civic education re-emerged through fragmented reforms across primary and secondary levels, reflecting growing concerns about civic knowledge. The period from 2008 to 2010 saw the introduction of the "Citizenship and Constitution" curriculum, which broadened the scope to include constitutional awareness, environmental responsibility, and road safety. Since 2011, continuous reforms culminated in the 2019 Education Reform Law mandating citizenship education as a compulsory subject across all school levels. This evolution reflects Italy's response to emerging challenges like multiculturalism, immigration, and democratic engagement. This study argues that the transition from fragmentation to a nationalized framework signifies Italy's institutional recalibration to multiculturalism, democratic renewal, and the need for social cohesion. The Italian case provides valuable insights into how educational policy evolves in response to changing societal needs and highlights the importance of cohesive citizenship education in pluralistic democracies.

14:55-15:20

96610 | *General Education and Sociology for the Middle Class: A Case Study of Curriculum Development in an Elite University in China*
Yuchen Han, The Chinese University of Hongkong, China

This paper explores the development of three general education (GE) sociology courses—Living Sociology, Gender Matters, and Philanthropy & Social Innovation—at an elite university in China, catering primarily to middle-class students. Drawing on a decade of teaching and learning experiences, the study examines how these courses intersect and adapt to shifting sociopolitical contexts, including neoliberalism, state propaganda controls, the COVID-19 pandemic, economic downturns, and rise of generative AI. The analysis unfolds in three parts. First, it contextualizes the courses within broader social climates, highlighting how macro-level forces shape curriculum design and pedagogical approaches. Second, it delineates the courses' core philosophies and diverse teaching strategies, emphasizing their roles in fostering students' sociological imagination and reflexivity—bridging personal experiences with structural dynamics. This section also underscores iterative adaptations based on quantitative and qualitative student feedback. Third, the paper demonstrates how these courses function synergistically as a cohesive curriculum, cultivating "whole-person" education in response to a rapidly evolving world. Central to this pedagogical model is a dialogical approach, wherein both instructors and students engage critically with knowledge (subject content) and reality (lived experiences and the shifting social landscapes). By documenting the curriculum development, the paper contributes to broader discussion on the role of sociology in GE and the unique challenges and opportunities faced by higher education institutions in China today.

14:05-15:45 | Live-Stream Room 2

Friday Online Parallel Session 2

ACE2025 | Curriculum Development and Educational Leadership

Session Chair: Saad Bakry

15:20-15:45

101238 | *Promotion of STEM Subjects in K-12 Education and Saudi Arabia's Mawhiba's Contributions*

Saad Bakry, King Abdulaziz and his Companions Foundation for Giftedness and Creativity, Saudi Arabia
Fahad Alfaiz, King Abdulaziz and his Companions Foundation for Giftedness and Creativity, Saudi Arabia
Nada Alqahtani, King Abdulaziz and his Companions Foundation for Giftedness and Creativity, Saudi Arabia

Saudi Arabia's Vision 2030 emphasizes drive toward sustainable development. In this context, one issue to consider is the promotion of STEM subjects -Science, Technology, Engineering, and Mathematics- in K-12 education. These subjects have been the development engine that generated the outcomes of the four industrial revolutions. This paper explores the promotion of STEM subjects in K-12 education. It introduces a framework that specifies and integrates the requirements for this promotion. In addition, it also addresses what the non-profit organization Mawhiba -King Abdulaziz and his Companions for Giftedness & Creativity- is doing in this regard. The given STEM promotion framework has four integrated dimensions.

- One dimension is concerned with building an innovative culture, that recognizes ethics, into dealing with STEM subjects.
- Another is related to using arts, such as visual arts and theater, in explaining STEM subjects.
- The third is associated with following up the continuous development of STEM subjects, especially with regards to special subjects like artificial intelligence.
- The fourth is involved with quality management requirements needed for supporting STEM projects and enhancing STEM pedagogy.

In line with these four STEM promotion dimensions above, the paper addresses Mawhiba's contribution to gifted education; and it highlights its efforts toward contributing to sustainable development.
The paper contributes to the activation of STEM subjects in K-12 education toward supporting national sustainable development; and it also highlights Saudi Arabia's Mawhiba's experience on how this can be achieved.

14:05-15:45 | Live-Stream Room 3

Friday Online Parallel Session 2

ACE2025 | Foreign Languages Education and Applied Linguistics

Session Chair: Lyster Ramos

14:05-14:30
96264 | *Bridging the Gap: Developing Lexical and Syntactic Complexity Through CLIL After Study Abroad Programmes*
Jason Pipe, Kanto Gakuin University, Japan

This study investigates the development of lexical and syntactic complexity in English as a Foreign Language (EFL) learners after returning from a five-month study abroad programme. While previous research suggests that immersion in English-speaking environments enhances fluency and general communicative competence, questions remain regarding its long-term impact on academic writing proficiency once returned to their home countries. Drawing on Content and Language Integrated Learning (CLIL) as a post-study abroad teaching strategy, this research explores whether CLIL instruction can foster continued growth in advanced academic lexis and syntactic structures. Analysing weekly written samples from six Japanese university students collected over one academic year, this paper aimed at observing changes in linguistic complexity. Through quantitative measures, findings revealed no statistically significant or consistent improvements in lexical nor syntactic complexity despite maintaining overall motivation and engagement of students since returning to their home country. These results suggest that while CLIL can provide a meaningful and content-rich context for EFL language use, it may not in itself be sufficient to stretch learning to observe measurable development in academic writing proficiency. The study highlights the need for more explicit instruction, targeted scaffolding and feedback on complex language use within CLIL frameworks, especially for learners transitioning from immersive environments back to domestic academic contexts. It also raises important pedagogical considerations for supporting sustained linguistic development in post-study abroad programmes.

14:30-14:55
100273 | *CLIL and TESL in the Worldwide Multilingual Turn*
Mariana Alvayero Ricklefs, Northern Illinois University, United States
Gunel Karimova, ADA University, Azerbaijan

This presentation reports on a qualitative case study (Merriam & Tisdell, 2016; Miles et al., 2020) about teaching English-as-a-second language (TESL) using a disciplinary content and language integrated learning (CLIL) approach (Coyle et al., 2010) with undergraduate students at a public university in Azerbaijan. The study is significant given the current multilingual turn in Azerbaijan (Leaver et al., 2021; Smolentseva & Platonova, 2022) that responds to large-scope political, economic, and cultural changes. In fact, the Azerbaijani language has replaced Russian (previously the official language as a USSR nation), the use of various ethnic languages is celebrated now, and foreign languages, particularly TESL through CLIL, have become very popular at secondary schools to teach math and science. However, the literature about language shifts at Azerbaijani universities is recent and limited. Thus, the current study intended to contribute to such a research gap. The research data included three types: students' questionnaires, interviews, and documents. Data analysis encompassed open-coding followed with focused-coding cycles, which yielded relevant patterns and themes for triangulated interpretation (Saldana, 2021). The study's findings demonstrated that these students significantly benefited from the university's idiosyncratic CLIL approach to TESL, especially those with more years at this university, and from the international studies, public affairs, and computer science programs. The study's findings also revealed students' growing awareness of equity issues related to age and gender. The presentation will end with implications to advance research and practice for TESL educators and for the multilingual turn in countries around the world.

14:55-15:20
100491 | *Enhancing Short-term Memory in Consecutive Interpreting: Using AI-generated Speech Simulations for English Majors at the Diplomatic Academy of Vietnam*
Phuong Do, Diplomatic Academy of Vietnam, Vietnam
Phuong Nam Dang, Diplomatic Academy of Vietnam, Vietnam

This study explored the use of AI-generated speech to support short-term memory and improving skills in consecutive interpreting (CI) training for English-majored students at the Diplomatic Academy of Vietnam. Eight third-year students were divided into two groups: one trained with AI-generated speeches, and the other with traditional human-voiced recordings. Over the course of four weeks, both groups practiced with materials that gradually increased in difficulty by adjusting speech speed, content density, and complexity. The results showed that students using AI speech made greater progress in tasks requiring higher cognitive effort. They also reported that the structured and gradually challenging nature of AI-driven speech helped them feel more confident and focused, despite occasional technical issues with audio quality. Overall, the study suggests that AI-generated speech can be a valuable tool in CI training which offers consistent and scalable practice to improve memory functions. However, students still struggled with note-taking and vocabulary, which requires the need for ongoing instructor guidance. A combined approach between AI tools along with teacher support is recommended to strengthen interpreting skills.

15:20-15:45
101186 | *English Pronunciation Challenges Among ESL/EFL Learners*
Lyster Ramos, Cebu Institute of Technology – University, Philippines
Nona Suerte, Cebu Institute of Technology - University, Philippines

This study explored the English pronunciation challenges of Asian ESL/EFL learners—specifically those from Japan, China, Vietnam, and Thailand—studying at QQ English in Cebu, Philippines. Anchored in Selinker's Interlanguage Theory, Lado's Contrastive Analysis Hypothesis, Eckman's Markedness Theory, and Hymes's Ethnography of Communication, the research identified common pronunciation difficulties of ESL/EFL students when speaking English at school; described pronunciation patterns in students' conversations; analyzed how these students perceive their pronunciation and how this perception affects their communication; and propose a 20-day speaking study plan to help ESL/EFL learners improve their pronunciation skills. Data were gathered through participant observation, audio recordings, and semi-structured interviews conducted over six days of fieldwork. The data were analyzed and interpreted using phonological analysis and thematic analysis. The phonological analysis focused on segmental and suprasegmental aspects of the recorded utterances and the kinds and causes of sound change. Interview data revealed that learners were generally aware of their pronunciation difficulties but could not tell what these errors were. The learners were more guarded when speaking English inside the classroom, but more relaxed and difficult to understand in conversations outside the classroom. They admitted they have to improve their pronunciation for better comprehensibility, not feeling offended or embarrassed when corrected. With these findings, a 20-day speaking improvement plan was proposed, integrating segmental and suprasegmental practice, functional language use, and confidence-building activities. In conclusion, pronunciation instruction should be contextual, culturally sensitive, and intelligible. It recommends longitudinal research to evaluate the impact of pronunciation interventions in ESL.

14:05-15:45 | Live-Stream Room 4
Friday Online Parallel Session 2
ACE2025 | AI in Education
Session Chair: Tomayess Issa

14:05-14:30
101234 | *Artificial Intelligence in Classroom Instructional Management for Gen Alpha Learners*
Mark Denice Baquiran, Universidad de Dagupan, Philippines

This study investigated the integration of artificial intelligence (AI) in classroom instructional management among basic education teachers, with a specific focus on the evolving learning needs of Generation Alpha. Using a descriptive-correlational design, data were gathered from 129 teachers in Dagupan City who had prior exposure to AI tools. The study examined teacher profile, access to technology, extent of AI use, perceived barriers, and training background. Majority of respondents were young and digitally equipped, 73.6% had no formal AI training. Most teachers reported only occasional use of AI, mainly through generative tools like ChatGPT, with limited adoption of more complex applications such as AI-powered grading and predictive analytics. Barriers such as insufficient training (63.3%), lack of time (32.8%), and limited access to infrastructure (30.5%) emerged as major challenges, alongside a small proportion expressing skepticism about AI's educational value. Statistical analysis revealed low to moderate correlations between teacher background variables and AI integration, highlighting that exposure alone does not ensure pedagogical confidence or depth of use. These findings informed the development of the AI-RISE + CREATE model, a cyclical, classroom-centered framework that positions Readiness, Integration, Structural Access, and Empowerment as core enablers, operationalizing six key AI-informed instructional practices. The study shows that teacher readiness—covering confidence, familiarity, training, and pedagogical alignment—is essential for meaningful AI integration. The model offers a guide for school leaders and policymakers to build AI-integrated learning environments that are adaptive, inclusive, and ethically grounded for Generation Alpha and beyond.

14:30-14:55
96316 | *AI in Education: Don't Skip the Skills!*
Christa Wuethrich, Independent Scholar, United Kingdom

AI is transforming K–12 education—automating essays, research, and even lesson planning. But while AI handles the busywork, the essential question remains: Which learning skills must students and teachers develop to truly benefit from this revolution? And when, how, and by whom are these skills being taught? Amid a global teacher shortage, rising mental health challenges, and increasingly diverse classrooms, education is under pressure. At the same time, research shows that the most important skill in school is "learning how to learn." Yet, studies reveal that up to 80% of students have never been explicitly taught effective learning strategies. Many teachers feel unequipped to teach them, constrained by time and standardized curricula. This session explores why foundational learning skills—like self-regulation, critical thinking, and adaptability—must come before AI integration. Drawing from cognitive science, neuroscience, pedagogy, and curriculum analysis, we'll highlight practical approaches to embedding these skills into daily learning. The goal: prepare students to navigate AI, not be navigated by it. Our call to action: Teach learning before tech. Equip educators with the tools and insights to build learning-ready minds—so AI can amplify, not replace, human potential

14:55-15:20
97556 | *Mexican Youth on AI: Their Visions of Tomorrow*
Angel Tellez Tula, Meritorious Autonomous University of Puebla, Mexico
Benjamín Gutierrez, Meritorious Autonomous University of Puebla, Mexico
Tutaleni Asino, Carnegie Mellon University, United States
Norma Elena Mendoza, Universidad de Colima, Mexico
Laura Herrera, La Universidad de Las Américas, Mexico

Nowadays, it is essential to understand the phenomenon of artificial intelligence (AI) and its impact on our daily lives. Understanding the young generation's perceptions of AI is relevant because Mexico is among the first ten countries that have begun to announce a National AI strategy. Furthermore, the AI ecosystem is significantly growing in its universities and large companies. Consequently, knowing the upcoming generations' postures on AI is relevant. This article discusses the findings of junior high school students' perceptions about using artificial intelligence (AI). Specifically, the development, the frequency of its usage, impact, and the students' posture on their learning using AI. The main goal of this study is to understand students' attitudes, knowledge, and concerns about AI. The findings of this research allow us to give a broader perspective on the phenomena of AI in a Mexican Context. The study is ongoing research, and it was conducted in Puebla, Mexico. A qualitative approach and a phenomenological method were used, and an online questionnaire was administered through Google Forms for data collection. The ongoing results start to deliberate whether AI will be used as a prosthesis or an essential organ daily for young generations. Most importantly, there will be a discussion on AI's impact on education policy, curriculum design, and AI integration in schools and how AI will reshape future educational strategies in Mexico. However, the limitation of this study is the small sample size, so it can not be taken as a Universal truth of AI Mexican youth students'perceptions.

15:20-15:45
100572 | *The Role of Instructors and University Support in the Ethical Integration of AI Tools: An Australian Perspective*
Tomayess Issa, Curtin University, Australia
Mahnaz Hall, Curtin University, Australia
Sarita Hardin-Ramanan, Curtin University, Mauritius
Raadila Hajee Ahmud-Boodoo, Curtin University, Australia

AI in higher education has undergone significant advancements, transitioning from basic computer-based instruction in the 1960s to modern AI systems that now leverage machine learning and natural language processing to provide personalised learning experiences, automated feedback, and predictive analytics in the 21st century. These AI tools can tailor learning paths, automate grading, offer round-the-clock student support, and enhance retention rates (Baidoo-Anu & Ansah, 2023). Furthermore, AI plays a crucial role in research, writing, and communication, enriching both learning experiences and administrative procedures (Doğan et al., 2025). This research investigated strategies to empower students in higher education to effectively utilise AI platforms. Data were collated from 86 postgraduate students in Business Management at an Australian university through interviews, and thematic analysis was employed to analyse the data. The results indicated that students seek guidance from the university and instructors to comprehend the ethical implications of AI usage while upholding academic integrity through seminars, workshops, and hands-on experiences. They also advocate for substantial changes to assessments that emphasise higher-order cognitive skills, critical thinking, and problem-solving using real-world case studies, oral exams and assessments that necessitate explanations and reflections to deepen engagement with the material. The findings underscored the significance of clear guidelines and expectations concerning AI integration. It was also found that students prefer a structured approach to integrating AI, where they can cite AI components and justify their incorporation in their work. Future research will explore the study objectives among a broader student population to enhance the research outcomes.

14:05-15:45 | Live-Stream Room 5

Friday Online Parallel Session 2

ACE2025 | Innovative Technologies in Education

Session Chair: Charles Naidu

14:05-14:30
98173 | *Effectiveness of Phylum Expedition on the Retention of General Biology 2 Concepts Among Grade 11 STEM Health Allied Students*
Fernando Alcantara Jr., Far Eastern University Diliman, Philippines
Gabriel Gael Lugtu, Far Eastern University Diliman, Philippines
Kevin Quitzon, Far Eastern University Diliman, Philippines
Francheska Rich Rasonabe, Far Eastern University Diliman, Philippines
Gwen Arianne Abonita, Far Eastern University Diliman, Philippines
Matthew Buenaflor, Far Eastern University Diliman, Philippines

This study explores the effectiveness of educational video games in enhancing concept retention in General Biology 2 among Grade 11 STEM-HA students at FEU Diliman. With biology's extensive content posing retention challenges, the researchers developed and implemented a custom educational game titled Phylum Expedition. Using a validated experimental design, they compared the performance of two groups: a control group using traditional methods and an experimental group using the video game. Pretests and posttests focused on organismal biology concepts were administered, along with a gameplay satisfaction survey for the experimental group. Results showed that the experimental group had a higher mean gain score (3.67) than the control group (2.24), and a left-tailed t-test confirmed a statistically significant difference, leading to the rejection of the null hypothesis. Students responded positively to the game's lore and gameplay, though found the controls less satisfactory. The study concludes that educational video games can effectively supplement traditional teaching. The researchers recommend integrating or developing educational games in classrooms, encouraging students, teachers, and developers to explore this learning tool.

14:30-14:55
No presentation

14:55-15:20
98323 | *Adoption of Bayesian Knowledge Tracing with Fuzzy Logic in the Development of Personalized Math Learning System for Grade 3*
Jomar Ruiz, Polytechnic University of the Philippines, Philippines

Background: The Philippines faces a critical mathematics education crisis with 82% of Grade 4 students performing below minimum proficiency levels. While global intelligent Tutoring Systems demonstrate effectiveness, existing solutions lack cultural adaptation and infrastructure resilience for developing countries. Innovation: This research introduces the first sequential Bayesian Knowledge Tracing to Fuzzy Logic (BKT→Fuzzy) processing architecture for elementary mathematics education. Unlike parallel hybrid approaches, our sequential model uses BKT outputs as Fuzzy Logic inputs, enabling sophisticated two-stage uncertainty refinement and culturally-adapted educational decision-making. Methodology: A quantitative descriptive evaluation design assessed system performance and user acceptance through two-week implementation with 10 Grade 3-4 mathematics teachers in Bataan Province, Philippines. Validated instrument measured system accuracy, timeliness, and Technology Acceptance Model constructs using 5-point Likert scales. Results: Math Tagumpay achieved performance metrics: 94% positive response for system accuracy (M=4.30/5.0) and timeliness (M=4.20/5.0), with 85% overall Technology Acceptance Model scores (M=4.04/5.0). The cultural adaptation framework demonstrated 100% acceptance among Filipino educators, with 99.2% system reliability and real-time response capabilities averaging 1.8 seconds. Significance: This study provides the first empirical validation of sequential BKT→Fuzzy processing for elementary mathematics, establishing performance superiority over traditional approaches while maintaining complete cultural appropriateness. The research offers a replicable framework for implementing advanced educational AI in resource-constrained environments, contributing significantly to educational equity and developing country technology adaptation.

15:20-15:45
97423 | *Rethinking Design Ideation and Education in 3D Space: A Mixed Reality Approach*
Charles Sharma Naidu, Sunway University, Malaysia
Goh Wei Wei, Taylor's University, Malaysia
An Taoran, Xi'an Academy of Fine Arts, China
John Hii, Taylor's University, Malaysia

This paper presents findings from a workshop with 2nd-year Architecture students at Xi'an Academy of Fine Arts, investigating the impact of Mixed Reality (MR) on design ideation and education. Traditional architectural design relies on 2D drawings and screen-based 3D models. This study explores MR's "cutting-edge" potential to "supercharge" early design studies by enabling direct interaction within real-world environments. The "Sketch Your Vision in 3D Space with Mixed Reality!" workshop aimed to integrate 3D space into the design process, allowing students to freely create 3D concepts and understand themes and representations. MR uniquely merges real and virtual worlds, facilitating real-time interaction between physical and digital objects. This provides an "intuitive way to prototype and evaluate designs in context". The workshop's pedagogy redefined the design process, moving beyond 2D sketching to "design directly in the world around you". Students developed an "intuitive feel for scale, depth, and how digital ideas can exist in real spaces" by actively sketching in three dimensions within their physical environment. Five groups decorated a chosen architectural space with a decorative structure using MR, evaluated on Interpretation of Selected Space, Conceptualization, MR Modelling, and Presentation. The objective was to observe the students' experience of 3D sketching in an envisioned architectural model compared to traditional 2D methods, highlighting MR's role in fostering an immediate, embodied approach to design ideation.

14:05-15:45 | Live-Stream Room 6
Friday Online Parallel Session 2
ACE2025 | Intercultural and International Education
Session Chair: Gabriella Pusztai

14:05-14:30
97524 | *Preparing Future Leadership: The Cultural Competencies of Third Culture Kids*
Narmadha Kamalakannan, Ecole Des Ponts Business School, France
Sezi Cevik Onar, Ecole Des Ponts Business School, France

As global mobility is increasing, a growing number of children are being raised across cultural and national boundaries, forming a unique group known as Third Culture Kids (TCKs). A TCK is spending a significant portion of their developmental years outside their passport country due to a parent's international work, often in diplomatic or expatriate roles. This paper is exploring how the cross-cultural exposure, adaptability, and identity complexity shaped by such experiences are positioning TCKs as valuable leadership talent in the emerging context of Industry 5.0. Existing literature is primarily focusing on the identity formation and adaptive traits of TCKs during their formative years. However, limited research is examining how these traits are evolving into adulthood especially within corporate and global leadership environments. This study is addressing that gap by using qualitative methods, specifically in-depth interviews with adult professionals who are identifying as TCKs. Participants are reflecting on their lived experiences, cultural fluency, and leadership behaviors in international workspaces. The research is identifying key competencies such as cultural intelligence and flexibility that are emerging as naturally developed assets among TCKs. It is analyzing how these capabilities are aligning with leadership demands in increasingly interconnected digital world. The findings are offering implications for global organizations seeking future-ready talent and for educators aiming to embed intercultural competence into mainstream curricula and leadership frameworks.

14:30-14:55
96099 | *Caring for Our Students: Supporting BIPOC Students in Southwestern Manitoba Schools Through Best Practice*
S. Michelle Kolbe, Western University, Canada

Manitoba public schools follow a conservative approach to education which does not meet the needs of its diverse student population. Historically, the Canadian school system has not provided equal opportunity for all students with a culturally appropriate education, adhering to a Eurocentric based school model. This paper examines the needs of BIPOC (Black, Indigenous, People of Colour) students in a Canadian public education system while recognizing accountability to the Truth and Reconciliation Commission of Canada's of the Calls to Action, 6ii and 63 (Truth and Reconciliation Commission of Canada, 2012). This Dissertation in Practice (DiP) reviews the challenges of a diverse student body in a Southwestern Manitoba middle school. Secondary research examines the needs and solutions posed through qualitative and quantitative findings. Leadership models are integrated into change models that create the steps needed for adjustments through a culturally responsive lense. Best practice is supported through culturally responsive leadership and can be initiated through school administration and teachers of Meadow School (a pseudonym). Strategies to create change require both a Western and non-Western approach using culturally responsive leadership and Indigenous education framework methodologies. Culturally responsive leadership, community relationship building and professional learning communities create capacity for inclusive change. Educational realignment is required to create best practice methodologies that adhere to the positionality and needs of an educational organization while recognizing the Calls to Action.

14:55-15:20
97420 | *Effectiveness of Domestic Internship Programs to Improve Intercultural Communication*
Frances Shiobara, Kobe Shoin University, Japan

This study will investigate the effectiveness of university students taking part in internship programs in English immersion settings in Japan as a way to improve English language self-efficacy and intercultural competence. It has long been acknowledged that study abroad programs have very positive effects on students' English language ability and intercultural competence, but due to the high expense it is beyond the reach of many students in Japan. In addition, due to curriculum requirements in many university departments, it can be very difficult for students to study abroad for extended periods. This research will look at whether participating in an internship program in Japan in an English immersion setting, such as an international school could be an alternative to traditional study abroad programs. A group of nine university students participating in an internship program once a week at an international elementary school were studied. Research was carried out using mixed methods with survey data and interviews collected over a four-month period. The presentation will report on changes in English language self-efficacy and intercultural competence during that period as well as give a detailed description of the program with advice on how other teachers could set up a similar internship program.

15:20-15:45
101511 | *Value Consensus and Disharmony in Education: Insights from the World Values Survey*
Gabriella Pusztai, University of Debrecen & Makovecz Campus Foundation, Hungary
Katinka Bacskai, Makovecz Campus Foundation, Hungary
Laura Morvai, Makovecz Campus Foundation, Hungary

Value education is a crucial element in preparing new generations, forming the basis for future life plans. Yet, in multicultural and multilingual societies, schools often avoid explicit value transmission and instead strive for neutrality, reflecting the challenges of educating across diverse cultural traditions. This raises important questions about the conditions under which value education can be effective. Despite its significance, little research has addressed how broader societal contexts—particularly the degree of value consensus or dissonance—shape the success of value education, and how these dynamics differ across countries. This study seeks to fill this gap by examining international patterns of value consensus. Our analysis draws on the World Values Survey (1981–2022), covering more than 90 countries. Using the Inglehart–Welzel cultural map and applying statistical methods including interquartile range analysis, t-tests, ANOVA, and correlation analysis, we investigate convergence and divergence in global value orientations. Findings reveal that some cultural clusters exhibit strong value consensus, often rooted in shared historical or institutional contexts, while others display persistent dissonance. Countries characterized by conservative and survival-oriented values tend to show higher internal harmony. These patterns suggest that value education is more likely to succeed where consensus provides a stable foundation, whereas dissonant and culturally plural contexts pose greater challenges for schools. The novelty of our study lies in highlighting the contextual conditions that support or hinder value transmission. We offer new insights into how societies can balance the preservation of shared cultural norms with the challenges of multicultural education.

14:05-15:45 | Live-Stream Room 7

Friday Online Parallel Session 2

ACE2025 | Professional Training, Development and Concerns in Education

Session Chair: Krishnendu Sarkar

14:05-14:30
97117 | *SoTL and University Teachers' Professional Development: The Implementation of the Teaching Practice Research Program in Taiwan*
Chia-Hui Wu, National Taiwan University, Taiwan

The Scholarship of Teaching and Learning (SoTL) is a research inquiry that closely reflects university teachers' disciplinary teaching practices. Through systematic investigations utilizing SoTL inquiry, university teachers gain insights into advancing their disciplinary teaching practice. This study focused on the continuing professional development university lecturers experienced while participating in the SoTL inquiry within the context of the Teaching Practice Research Program (TPRP) in Taiwan. Since 2018, this annually public-funded research grant has supported thousands of Taiwanese university lecturers and teaching fellows in improving their teaching practice using evidence-based SoTL inquiry. By interviewing six university teachers who engaged in the TPRP, evidence has shown that the SoTL inquiry benefits their academic development as lecturers. Participants emphasized student learning and their reflections on teaching, learning and pedagogy through the SoTL, motivating them to advance their teaching practices, which are crucial in addressing teaching and learning issues in higher education. Nevertheless, they distinguished their professional development into teaching and research development, with a stronger inclination to solve actual problems in classrooms rather than conducting research inquiries. Most of them deliberated that the SoTL research contained many pedagogical and educational inquiry elements that differed from their professional training as disciplinary professionals, which made them struggle to delve into the SoTL inquiry at the beginning. Overall, this study highlighted the value of SoTL inquiry in advancing teaching practices and addressing the challenges university teachers face in conducting SoTL inquiry.

14:30-14:55
101184 | *A Leap Towards Artificial Intelligence (AI) Competency Level for Teachers*
Jann Alfred Quinto, Ateneo De Manila University, Philippines

As Artificial Intelligence (AI) continues to reshape education, the need for AI-literate teachers becomes increasingly critical. There remains limited data on teachers' AI competency in terms of knowledge, attitudes, ethical understanding, and use of technologies. Thus, this study sought to assess the level of AI literacy progression among 120 Teachers using a UNESCO Competency Framework for Teachers (CFT), profile, differences in the progression levels. Findings showed that the majority of teachers are female, a novices (1-5 Years in service) in the teaching profession, and with no trainings attended related to AI. Teachers strongly agree that they "Acquired" basic AI knowledge, skills, and values along Human-centered mindset, Ethics of AI, Foundations and applications, AI pedagogy, and AI for professional growth. In addition, there is no significant difference in AI literacy competency progression level across profile. This shows that male or female, with or without training and new in service teachers, "acquired" basic principles and applications of AI competencies through self-exploration. Literacy competency level among the respondents is on the "acquired level". Furthermore, there was a significant gap between the Human-centered mindset and the AI professional growth domain. This implies awareness of AI importance, belief that AI is human-led led and appreciating AI capacities is high, while exploration of AI tools to enhance professional development, and utilization of AI tools confidently is low. This suggests that there should be training on the use of AI tools in teaching before useful programs become obsolete due to rapid technology change.

14:55-15:20
96982 | *The Retention of Expatriate Teachers: Exploring Its Influence on Curriculum Design, Teaching Practices, and Student Learning Outcomes*
Ryan Wong, Tsinglan School, China

This study examined the influence of expatriate teacher retention on curriculum execution, pedagogical methods, and student academic performance in seven (7) international schools in Asia. This study used a mixed-methods approach, integrating survey data among one hundred fifty seven (157) expat teachers, fifty two (52) school administrators, and two hundred five (205) students. Additionally, comprehensive interviews with seven (7) expatriate teachers, four (4) school administrators, and six (6) students were conducted to investigate the impact of faculty stability on academic performance, classroom engagement, and overall student happiness. The findings indicate that high teacher retention improves instructional consistency, fortifies teacher-student connections, and fosters a supportive learning environment, whereas frequent turnover breaks continuity and diminishes student motivation. While the study contains useful information, its reach is limited by the small number of expatriate teacher participants and key persons interviewed, as well as the potential influence of socially desired responses. These aspects should be taken into account when extrapolating the findings to foreign school settings other than the Type C hybrid model in Asia. This research underscores the necessity for deliberate retention plans and professional development to maintain high educational quality in international school environments. The discussion also encompasses implications for school leadership and policy formulation.

15:20-15:45
101532 | *Increased Efficacy of Teachers' Curated Lesson Materials in Learning Management Systems*
Krishnendu Sarkar, NSHM Knowledge Campus Kolkata, India

Reportedly, in the times of AI and disruptive technologies the sustained usage of faculty-made lesson materials by students are adversely being affected. Thereby, impairing the digital learning goals of Learning Management System (LMS), which were meant to enrich educational activities, especially in traditional spaces. To address a similar scenario in author's institution, a design for six sigma using DMADV methodology was initiated along with academic leadership team across various verticals of media, design, pharmacy, allied health, business & management, hospitality & tourism and computing & analytics with a resolve to introduce a new process to increase the effective usage of lesson materials from sub-optimal (below 25%) to above-optimal level (above 55%) within the period of 3 months of project implementation across the institution. The financial motivation of Institution has been maximization of return on investment on digital infrastructure, minimization student backlogs that contributed majorly to drop-outs and on the other side maximization of intake over the competition based on higher quality of learning and outcomes. This paper elucidates the structured view of the project in form of charter, voice of stakeholders, SIPOC, CTQ specification table, prioritization matrix, Kano modelling, sampling the population of students, faculty and alumni, root cause analysis, statistical tests and validation of the new design by way of repurposing Bloom's Taxonomy with 10 human-human potential tracks mapped with higher-order thinking action verbs for best-fit lesson materials, negating rework and waste.

15:55-17:35 | Live-Stream Room 1
Friday Online Parallel Session 3
ACE2025 | Higher Education
Session Chair: Sudarshan Rao K

15:55-16:20
96011 | *Creative Approach to Film Directing Module During the Pandemic*
Wesley Leon Aroozoo, Lasalle College of the Arts, Singapore

This presentation outlines the innovative pedagogical strategies employed in a Film Directing Module taught at a university in Singapore. Designed as an introductory module for students transitioning from non-fiction to fiction filmmaking, the course emphasizes directing actors and crew on set. Central to its philosophy is the creation of experiential learning opportunities that foster meaningful interactions with the local acting community. The curriculum includes exercises that aim to boost student confidence when communicating with professional actors, address common directing pitfalls, and culminate in the production of a personal directing project showcasing each student's unique style. A key highlight is the long-standing Director-Actor Roundtable collaboration with HCAC, initially conducted in-person through a dynamic "speed dating" format and later adapted to virtual platforms like Zoom due to evolving safety regulations. Despite the shift to online delivery, the essence of interaction and learning was preserved through innovative use of breakout rooms and virtual directing exercises. In response to pandemic-related constraints, classroom directing workshops were redesigned to prioritize safety while maintaining instructional integrity. For example, scenes originally requiring physical proximity were creatively reinterpreted to accommodate social distancing, with students leveraging spatial dynamics and props to enhance narrative delivery. These adaptations not only ensured compliance with safety regulations but also stimulated creative problem-solving, turning limitations into learning opportunities. The module exemplifies how flexibility and creativity in teaching methods can enrich student experience and prepare them for real-world directing challenges.

16:20-16:45
96879 | *Fostering Climate Literacy: A Brochure Approach to Climate Change Education for SDG 13 in Non-Science Fields*
Tricia Ompoc, Bulacan State University, Philippines

The research initiative focuses on developing an instructional brochure about climate change for non-scientists, defining it, explaining its science, examining socioeconomic implications, and presenting successful transdisciplinary projects. The brochure is designed to increase community awareness and encourage the pursuit of Sustainable Development Goal 13, which involves climate change's interconnected social, economic, and cultural elements. In the assessment of the awareness of climate change in the non-science students and teachers and the effectiveness of the produced brochure for this group, a mixed-methods approach was employed. This included a pre-survey to measure the climate awareness of the non-science students and teachers and pilot testing of the brochure using linear scaling. The brochure was critiqued by an environmental science expert and recommendations for improvement were made. The findings revealed that a vast majority of respondents showed strong agreement regarding different aspects of the brochure in each category under review. Production of a climate change brochure specifically for the non-science students and teachers has been recognized as an effective education strategy to bridge the existing knowledge gaps. The brochure is designed to fill the gaps and increase understanding and interest regarding climate change among the target group.

16:45-17:10
100371 | *The Living Box: Designing with Micro Patterns for Macro Impact, a Science-Informed Design Pedagogy Approach in the Educational Studio*
Chadi El Tabbah, American University in Dubai, United Arab Emirates
Natalia Albul, Palm Beach State College, United States
Muriel Tahtouh Zaatar, American University in Dubai, United Arab Emirates

This study explores the role of interdisciplinary collaboration between the Biological and Physical Sciences and Interior Design departments in advancing human-centered design within undergraduate education. A science-informed methodology was embedded into the design curriculum to deepen students' understanding of the human-nature relationship and to foster more intentional, empathetic design thinking. Through participation in a biology lab studio, students observed leaf microstructures using microscopy which informed the development of The Living Box, a conceptual residential design centered on well-being, emotional resonance, and sensory engagement. By analyzing natural systems, students explored how micro-scale biological structures can inspire macro-level spatial responses, fostering a more resilient and holistic design approach. The study investigated how exposure to scientific inquiry influenced students' engagement with human-centered design. Two research hypotheses were proposed: (1) interdisciplinary collaboration enhances students' conceptual understanding of the design process through a human-centered framework, and (2) direct interaction with biological systems cultivates emotional connection and greater design intentionality. Two cohorts of junior-level interior design students (N = 29) from the 2024 and 2025 classes participated. Employing a mixed-methods approach, combining Likert-scale survey data and coded qualitative responses, the findings indicate that science-integrated pedagogy enhances design and builds interdisciplinary fluency. Students reported increased engagement, deeper emotional connection to nature, and improved ability to translate biological insights into spatial strategies, highlighting the potential of science-informed design education.

17:10-17:35
95049 | *Application of Active Learning in Student Learning for the Management and Economics Course*
Sudarshan Rao K, Shri Madhwa Vadiraja Institute of Technology and Management, India

The traditional classroom teaching model involves the teacher delivering lectures while students listen and observe. Research has shown that students retain knowledge more effectively when they engage in active learning, which emphasizes hands-on experiences. To cater to the learning styles of the current generation, it is crucial to incorporate active learning strategies in the classroom. In this study, various active learning techniques such as minute papers, summarization exercises, think-pair-share activities, flipped classes, case studies, and industrial visits were implemented for the course "Management and Engineering Economics" in the fifth semester of Mechanical Engineering. Additionally, innovative assessment methods like live quizzes using Mentimeter, online quizzes, crosswords, and student seminars were incorporated. The performance of students exposed to active learning techniques (academic year 2022-23) was compared with those taught using traditional teaching and assessment methods (academic year 2021-22) to evaluate the impact of active learning. The percentage of students scoring above an A grade in continuous internal assessment and the semester-end examination increased by 14.2% and 73.34%, respectively, compared to the previous year. Moreover, the average course outcome attainment level, as measured by the course-end survey, was 96.67% for 2022-23, compared to 87.33% in 2021-22. Mid-course student feedback on the teaching-learning process, collected using a five-point scale, also indicated positive responses for 2022-23, reflecting an 8% increase compared to the previous year. The results demonstrate that implementing active learning techniques enhances student performance and improves learning outcomes.

15:55-17:35 | Live-Stream Room 2

Friday Online Parallel Session 3

ACE2025 | Special Topics: Alternative Education and TVET

Session Chair: Celbert Himang

15:55-16:20
96623 | *Left Behind by the System: Exploring the Role of Alternative Education for Central Jakarta's Marginalized Children*
Ajeng Satiti Ayuningtyas Okta Ferdiana, Universitas Islam International Indonesia, Indonesia

This qualitative research critically examines the role of alternative education programs in addressing the systemic educational exclusion faced by marginalized children in Central Jakarta, Indonesia. Drawing on Paulo Freire's critical pedagogy, Sharon Gewirtz's social justice education, and Bruce Biddle's functional role theory, the study explores how nonformal education models—such as street schools and community learning centers—navigate structural inequalities while negotiating their social roles. This research used a case study approach. Data were collected through in-depth interviews with marginalized children (n=3), their parents (n=2), and facilitator teachers (n=4), complemented by participant observation and document analysis. The study argues that alternative education in Jakarta operates within a paradox: it supports the immediate needs of marginalized children while strengthening their long-term transformative opportunities. Implications reflect policy reforms to integrate nonformal certification into the national system and reorient programs toward Freirean practices. By centering the voices of marginalized participants, this study contributes to the global advancement of education as a tool for nurturing rather than social reproduction.

16:20-16:45
97341 | *Unveiling Psychological Resilience in Teachers of Alternative Education*
Rayen Jui-Yen Chang, National Chengchi University, Taiwan

As education systems around the world search for more inclusive, student-centered, and innovative approaches, alternative education models have gained increasing attention. Education models such as Montessori, Waldorf, and democratic schools represent shifts toward personalized learning, holistic development, and flexible curriculum structures. While these models promote pedagogical innovation and deeper student engagement, they also place substantial emotional and professional demands on teachers. Educators in such contexts often face high expectations, evolving roles, and limited systemic support, which underscores the critical importance of psychological resilience. This study aims to identify and prioritize the key factors that influence the development of psychological resilience among teachers working in alternative education. Drawing on the fuzzy analytic hierarchy process (FAHP) method, the research assesses five core dimensions: personal traits and psychological adaptability, professional development support, working conditions and administrative backing, interpersonal relationships and school climate, and strategies for managing stress and challenges. Data were collected from teachers, counselors, and professionals familiar with alternative education. Results show that internal psychological resources are the most influential, followed by relational and structural factors within the school context. This study not only contributes to a deeper understanding of teacher resilience in non-traditional settings but also offers practical insights for supporting educator well-being and sustaining innovative educational practices. The proposed evaluation framework may also serve as a foundation for future studies exploring resilience in other educational or professional environments.

16:45-17:10
96867 | *Stuck or Stepping Forward: The Dual Realities of Industry 4.0 Integration in Philippine TVET*
Rayhanah Mariano, Ateneo de Manila University, Philippines

The onset of Industry 4.0 demands for transformation in TVET curricula, pedagogy, and infrastructure. The study examines how TVET institutions integrate industry 4.0 and identifies enabling and constraining factors. This is a qualitative study, grounded in critical realism and morphogenetic approach. Semi-structured interview was conducted with TVET educators in the National Capital Region (NCR) to unpack underlying mechanisms and structural conditions influencing Industry 4.0 integration. Thematic analysis revealed five overarching dispositional themes: driving institutional integration to digital and industry 4.0 demands, strengthening collaborative partnerships and industry engagement, fostering professional development and transformative mindset, confronting infrastructural and financial challenges, and navigating policies and governance issues. Findings reveal dual trajectory in Philippine TVET, adaptive institutions are adopting digital tools, build learning factories, and sustainability-driven curricula, while others face significant structural constraints. Key enablers include synergistic, partnerships, industry-driven curriculum reforms, institutional cultures of collaboration, and professional development fostering adaptive mindsets. However, critical constraints persist including insufficient funding, outdated infrastructure, unclear policies, and resistance from less tech-savvy and older trainers. Socioeconomic barriers also impede learner access to digital tools, worsening educational inequality. This study provides novel empirical insights into Industry 4.0 in Philippine TVET through its critical realist lens, uncovering unique phenomena (e.g. informal industry linkages and symbolic compliance) and grassroots adaptation strategies. Further research may employ cross-regional comparisons to examine localized integration patterns and conduct longitudinal studies tracking long-term institutional transformation pathways. These findings underscore the need for context-sensitive policies balancing technological advancement with systematic readiness in TVET ecosystems.

17:10-17:35
101173 | *Unlocking Process Analysis Across Domains: A Systematic Comparison of Industrial Technology and Educational Applications*
Celbert Himang, Cebu Technological University, Philippines
Gregorio Jr Pajaron, Cebu Technological University, Philippines
Melanie Himang, Cebu Technological University, Philippines

This report presents a comparative analysis of process analysis approaches implemented in industrial technology and the educational sector, derived from a systematic review of 40 highly relevant studies. Process analysis methods, including process mining, machine learning, latent class analysis, and systematic review protocols like PRISMA, were found to be utilized across both sectors but adapted to meet distinct objectives. In industrial contexts, the emphasis typically centers on operational efficiency, predictive control, and resource optimization, leveraging tools such as clustering-based predictive monitoring and machine learning for fault detection. Conversely, educational implementations prioritize pedagogical alignment, student engagement, and outcome-focused analytics, utilizing techniques like adaptive learning, sequential pattern mining, and latent class analysis. Both sectors face challenges such as data quality issues and system integration, with industrial processes highlighting scalability and AI integration, while education focuses on digital readiness and support for educators. This cross-sector comparative review underscores opportunities for synergistic adaptation of tools, revealing benefits of industrial precision for academic frameworks and educational adaptability for industry applications. By synthesizing findings, the report encourages interdisciplinary refinement of process analysis practices, offering insights to researchers, policymakers, and practitioners for innovation-driven strategies that bridge gaps between these domains.

Notes

15:55-18:00 | Live-Stream Room 3

Friday Online Parallel Session 3

ACE2025 | Foreign Languages Education and Applied Linguistics

Session Chair: Kideok Kim

15:55-16:20

97451 | *Augmented Reality Manga (ARM): The Use of the Addie Model for Japanese Reading Enhancement in the Republic of China*
Ayana Kato, Rajamangala University of Technology Thanyaburi, Thailand
Metee Pigultong, Rajamangala University of Technology Thanyaburi, Thailand

The research question in this study is 1) What is the efficacy of the augmented reality that the researcher is developing in enhancing the Japanese skills of students? 2) Just how effective will the comparison of the student's learning achievement scores be? The research objectives are to 1) evaluate the learning achievements of students between pre-test and post-test scores using an augmented reality comic book and 2) determine the effectiveness of the augmented reality comic book after its use. The study population consisted of 74 students in the College of Science and Technology at Ningbo University during the first semester of the academic year 2025. The purposive method was employed to select 24 students as the samples for this research. The data was analyzed and interpreted using the following statistics: dependent t-test and effectiveness index. 1) The anticipated advantages include the potential for augmented reality to enhance the Japanese language skills of students. 2) Augmented reality enhances students' self-assurance and facilitates the completion of classroom assignments more efficiently. 1) This study may serve as supplementary evidence for individuals who wish to conduct action research concerning the utilization of digital technology. According to the research findings, the paired t-test comparing the pre-test and post-test results demonstrated statistically significant differences at the 0.05 level ($t = 42.10$, $p = 0.00$). The results also indicated that the effectiveness index was .2205, which indicates that the students experienced a 22.05% increase in cognitive score improvement following the test.

16:20-16:45

97483 | *Students as Co-Creators: The Impact of Student Autonomy on Engagement and Motivation in an English Language Classroom*
Jinal Purohit, Indian Institute of Information Technology Vadodara, India
Barnali Chetia, Indian Institute of Information Technology Vadodara, India

As student-centered learning continues to gain traction in higher education, there's still a noticeable gap between theoretical advocacy and practical implementation, especially in language classrooms, where teaching remains predominantly teacher-driven. This study investigates the impact of granting English language learners a participatory role in their learning experience, a measured level of autonomy in determining what they learn, how they engage with content, and the materials employed. The central inquiry guiding this research is whether partial involvement in curriculum design can enhance students' motivation, engagement and investment in classroom experience. While ideas around learner autonomy and motivation aren't new, the way they're applied often lacks nuance. Total control might overwhelm students, while rigid structures leave little room for ownership. This study explores a middle path between the extremes. Conducted with 100 second-year students of a technical institute of Gandhinagar, Gujarat, India, the research adopts a mixed-methods design innated in self-determination theory, constructivist learning theory and learner autonomy. In the experimental design, students help choose what they want to focus on, in terms of skills, methods, and materials. Based on these choices, a subsequent session was designed to align with students' preferences. During the session, students complete a task, respond to surveys, and provide reflective feedback. The results indicated increased cognitive and emotional engagement. Many students reported a stronger sense of involvement and their performance reflects more purposeful and directed effort. The study adds to discussions on motivation and autonomy, while suggesting frameworks to make the language classrooms more participatory and purposeful.

16:45-17:10

101510 | *The Phonetic/Phonological Learning Effects of Teams 'Reading Progress' for English Language Learners Listening to Their Own Speech*
Hanako Hosaka, Tokai University, Japan

Reading aloud is the act of vocalizing sentences that have been visually read. In fact, it has become clear that reading aloud can bring about a variety of effects. This study examines the phonetic learning effects of reading aloud training, based on the "speech chain" model (Denes & Pinson, 1993) as a framework. According to the speech chain model, "speech communication consists of a chain of events linking the speaker's brain with the listener's brain" (4). Through the practice of reading aloud, individuals are able to: (1) focus on accurate pronunciation, (2) articulate written text while reading, (3) self-monitor pronunciation, (4) promptly correct any deviations from intended sounds, and (5) comprehend semantic content. Although reading aloud may appear straightforward, multiple processes as described above are carried out simultaneously. Therefore, by continuing reading aloud training, learners practice monitoring, correcting, and improving their speech, ultimately leading to improved listening comprehension and pronunciation skills. This study reports on the effects observed after conducting self-directed English reading aloud using Teams "Reading Progress," focusing on the phonetic aspect, once a week for ten sessions. The results indicate gradual improvement in the articulation of challenging pronunciations and reduction in the use of fillers through continued practice. Further overall improvement can be expected if continued steadily.

15:55-18:00 | Live-Stream Room 3

Friday Online Parallel Session 3

ACE2025 | Foreign Languages Education and Applied Linguistics

Session Chair: Kideok Kim

17:10-17:35

97291 | *A Case Study in Formative Assessment Integration for Advanced Korean Language Learners*
Jisook Kim, Defense Language Institute Foreign Language Center, United States
Kideok Kim, Defense Language Institute Foreign Language Center, United States

This case study explores the integration of formative assessment strategies in an advanced Korean language classroom at the Defense Language Institute, where students often struggle with interpreting nuanced meanings in authentic materials and sustaining meaningful interpersonal communication in the target language. The instructional design aimed to support these learners' interpretive depth, strategic interaction, and presentational skills through a structured sequence of formative assessment tasks. This presentation outlines a two-hour lesson designed to build communicative competence in Korean through an integrated sequence of tasks. The lesson begins with a Retrieval Task to activate prior knowledge and assess baseline understanding. Students then engaged in Interpretive Tasks, working with authentic Korean texts to extract key ideas, analyze author perspectives, and interpret meaning in cultural context. This interpretive work set the foundation for Interpersonal Tasks, including a Discussion Choice Board and a Four Corners activity, where students express and negotiate multiple viewpoints. The lesson concludes with a Presentational Task in which students synthesize their insights and delivere structured presentations, guided by a detailed rubric. Classroom observations and students' reflections revealed increased engagement, improved critical language processing, and greater confidence in expressing complex ideas in Korean. The formative assessment framework not only measured learning progress but also supported learning, fostering a growth mindset and metacognitive awareness. This case study offers a replicable model for language educators aiming to implement formative assessment principles in advanced-level classrooms. Attendees will gain practical strategies for designing tasks that both assess and advance student learning in real-time.

17:35-18:00

101046 | *From Anxiety to Engagement: Inclusive Strategies for Low-Proficiency EFL Learners in Japan*
Ikhlas Abdul Hadi, Globiz Professional University, Japan

Previous research on English language learning in Japan indicates that many students feel nervous about the communicative aspects of class, partly due to limited opportunities to use English in natural settings (Gullikson 2024:15–16). This paper examines an English program at a Japanese vocational university in which students engaged in weekly conversations with native English speakers from the United States over a one-month period. The study investigates how this program influenced students' intrinsic motivation to learn English while managing cognitive load during authentic communication. Although conversational classes in the institution are typically reserved for intermediate to advanced learners, findings show that with targeted scaffolding by instructors, even low-proficiency students were able to participate meaningfully. The results suggest that structured interaction with native speakers, combined with pedagogical scaffolding, can reduce learner anxiety, support cognitive processing, and enhance motivation in low-proficiency EFL contexts. These findings have implications for designing inclusive communicative programs in vocational education settings.

15:55-18:00 | Live-Stream Room 4

Friday Online Parallel Session 3

ACE2025 | AI and Emerging Learning Modalities

Session Chair: Amna Khaliq

15:55-16:20

101522 | *Cross-Cultural Approaches to AI Integration in Higher Education: A Conceptual Framework*
Lawrence Ibeh, Berlin School of Business and Innovation, Germany
Benjamin Bensam, Berlin School of Business and Innovation, Germany
Kaddour Chelabi, Berlin School of Business and Innovation, Germany
Sushma Kumari, Berlin School of Business and Innovation, Germany

Artificial Intelligence (AI) has rapidly infiltrated classrooms; nevertheless, its implementation in higher education varies significantly across different global contexts. Existing studies predominantly emphasize system performance or classroom-level advantages, but insufficient emphasis has been directed towards the sociological, cultural, and policy ecosystems that significantly influence the acceptance, rejection, or longevity of AI adoption. This presentation advocates for a comprehensive understanding of AI in education, connecting micro-level applications with macro-level preparedness considerations. The research identifies three persistent obstacles through comparative analysis of Germany, Nigeria, and India: institutional preparedness, cultural receptivity, and congruence with policy frameworks. These problems highlight the constraints of regarding AI adoption solely as a technological or educational issue. They advocate for a conceptual framework that incorporates digital literacy, societal trust, and regulatory contexts into future adoption models. The presentation delineates a framework for contextualizing classroom data within broader AI adoption drivers. It asserts that cross-cultural comparison is vital for establishing ethical and sustainable pathways for AI integration in higher education. This work emphasizes the convergence of technology, politics, and culture, urging educators, researchers, and policymakers to contemplate how AI implementation might be informed by global perspectives while being responsive to local contexts. The presentation concludes with a request for cooperation in developing culturally informed AI preparation models that transcend isolated classroom measurements and aim for inclusive and globally pertinent educational futures.

16:20-16:45

96852 | *Meta-Analysis of Studies on the Effectiveness of Blended Learning in Enhancing Academic Achievement According to Certain Psychological and Academic Variables*
Eisa AlBalhan, Kuwait University, Kuwait

This study aimed to conduct a meta-analysis to evaluate the effectiveness of blended learning in improving academic achievement and developing certain psychological and academic variables. The sample of the study consisted of 150 studies, master's theses, and doctoral dissertations, which were obtained through a review of studies and published research between the years 2000 and 2023. The study employed a meta-analytic approach to analyze the results of research and academic theses on the effectiveness of blended learning, considering the dependent variables, which included: academic achievement, creativity, critical thinking, social values, life skills, social interaction, learning motivation, analytical thinking, positive behavior, teamwork skills, and strategic thinking. Additionally, independent variables such as the field of study and the duration of the program were taken into account. A symbolic model was used to collect the data. The results of the study concluded that the effect sizes were heterogeneous across the different studies, which necessitated the use of a random-effects model for data analysis. The findings revealed that the overall effect size for studies investigating the effectiveness of blended learning in improving academic achievement was 0.82, which is considered a "strong effect size" according to Cohen's classification, where an effect size above 0.8 is categorized as strong. The study also showed that blended learning had a positive effect on a range of psychological and academic variables, including creativity, critical thinking, social values, life skills, social interaction, learning motivation, analytical thinking, positive behavior, teamwork skills, and strategic thinking. The results indicated that life skills and learning motivation benefited the most from blended learning, while positive behavior showed a lower effect compared to the other variables.

16:45-17:10

101132 | *Project-Based Learning in the Age of AI: Fostering Human-Centered Education and Community Engagement*
EunKyung Jeong, Southwestern Oklahoma State University, United States

This research examines the transformative potential of project-based curricula and process-oriented assessments in higher education, particularly in light of the evolving role of artificial intelligence (AI) in delivering knowledge. Drawing from lived experiences in implementing these curricula, the researcher illustrates how such practices cultivate responsible global citizens who engage positively with local and international communities. This educational model, based on hands-on art projects in rural western Oklahoma, employs qualitative research methodologies, including ethnography and autoethnography. The study highlights the benefits of project-based approaches in addressing concerns about plagiarism and fostering immersive learning experiences. In this model, educators play a crucial role as collaborators and facilitators, guiding students through challenges and helping them develop problem-solving strategies. Instructors can spend less time on the simple delivery of information and knowledge, instead inspiring and empowering students to contribute meaningfully to their learning and their local communities. The research also discusses the unintended benefits of connecting generations and communities through collaborative college projects that invite community members, highlighting how higher education institutions can foster accessible arts, culture, and education for all in society. While the study has limitations related to its specific location and discipline, the insights can be used by educators in other disciplines and contexts. This research aims to inspire educators to adopt student-centered pedagogical methods that utilize hands-on collaboration, maintain a human-centered approach to education, and immerse students in career-ready experiences. This approach fosters a sense of connection and empathy among students and communities in an era of AI.

15:55-18:00 | Live-Stream Room 4

Friday Online Parallel Session 3

ACE2025 | AI and Emerging Learning Modalities

Session Chair: Amna Khaliq

17:10-17:35

100368 | *Shaping Tomorrow: Three Game-Changing Technologies for the Future of Online Education*
Amna Khaliq, Unviersity of Fredericton, Canada

In this research paper, the integration and future of technology are discussed to provide educational institutions with recommendations on how to increase revenue streams by expanding the pool of potential students. The research literature suggests that technology is a powerful tool to be utilized in online education systems, particularly for millennials who have access to technology. The education system should incorporate advanced technological tools to create a holistic and fun learning environment. The phenomenological qualitative research method was employed during interviews with eighteen professors to explore the potential for artificial intelligence to revolutionize the education system in the near future. To create an uplifting educational experience, recommendations are given to academic institutions: user-friendly LMS, synchronous classes and workshops, interactive course content, collaboration tools among faculty and students, online discussions and forums, mobile-friendly learning methods, virtual and augmented reality, and automatic assessment.

17:35-18:00

97480 | *Exploring Students' Perception Towards the Integration of AI in Higher Education: Motivation and Challenges in Mauritius*
David Authier, Universite de Limoges, France
Rajeev Khoodeeram, Universite des Mascareignes, Mauritius
Bushra Khoyratty, Universite de Limoges, France

Artificial intelligence (AI) is transforming higher education by improving learning experiences, automating administrative tasks, and providing personalized support to students. However, research on students' attitudes towards AI remains limited, particularly in developing countries like Mauritius. This study examines students' familiarity with AI tools, their perceptions of AI's impact on education, and the key challenges in its adoption.
A mixed-methods approach was used to explore the perceptions of AI users in their educational pathway. Quantitative data were gathered though a structured questionnaire assigned to 331 participants and for the qualitative data, student's views were collected through a focus group discussion. Descriptive and inferential statistical methods were used to analyse data collection, while qualitative responses were thematically coded. Findings indicated that while students acknowledge AI's potential in education, they expressed concerns regarding accessibility, ethical implications, and institutional preparedness. Furthermore, many students lack awareness of AI's role in their academic and professional futures, highlighting the need for targeted AI education initiatives. These insights contribute to ongoing discussions on AI adoption in higher education, providing a foundation for further research that includes faculty and administrative perspectives to develop a holistic AI integration framework. The study recommends integrating AI literacy programs within university curricula, ensuring equitable access to AI tools, and establishing clear ethical guidelines for AI use in education. Additionally, universities should involve students in AI policy development to promote comprehensive decision-making.

15:55-18:00 | Live-Stream Room 5

Friday Online Parallel Session 3

ACE2025 | AI and Digital Literacy

Session Chair: Neslihan Köse

15:55-16:20
97417 | *Evaluating the Impact of the CLICK Program on the Digital Literacy of Older Adults*
Leah Ybañez, University of Cebu, Philippines
Ma. Catherine Carumba, University of Cebu, Philippines
Jia Nova Montecino, University of Cebu, Philippines
Jeff Salimbangon, University of Cebu, Philippines
Heubert Ferolino, University of Cebu, Philippines
Neil Basabe, University of Cebu, Philippines

In an age of increasing digitization, older adults are frequently challenged in adapting to and using technology. This study aims to evaluate the impact of the CCS–CARES CLICK (Computer Literacy cum Kabuhayan) Program on the digital literacy of the elderly. Using a mixed-methods research design, data were collected before, during, and after the training sessions. The survey was conducted in the community, and the respondents were older adult barangay workers who were beneficiaries of the CLICK Program. Researcher-adapted pretest/posttest questionnaire, observation checklist, performance-based digital task evaluations, and a confidence and attitude survey, supported by semi-structured interviews, were employed as the instruments. Descriptive statistics were used to analyze quantitative data, and thematic content analysis was performed on qualitative responses. Results showed that participants had advanced significantly in the development of digital skills, with most being capable of performing basic digital actions, such as sending emails, searching for information on the Web, or using smartphones. It was also found that participants' confidence and attitude towards technology, independence, and social connection increased. Findings speak to the promise of CLICK as a means to promote older adults' digital literacy and technological empowerment.

16:20-16:45
97191 | *Cultivating Critical Prosumers in the Information Age — Teaching Digital Literacy in Higher Education*
Jodie Luu, National University of Singapore, Singapore

The widespread adoption of smartphone and artificial intelligence have empowered a new generation of prosumers who both consume and produce online content for various purposes, including entertainment, education, and at times, deception and harassment. According to the World Economic Forum's Global Risks Report 2025, misinformation and disinformation have emerged among the top threats to society. This urgency suggests the higher education sector play a more active role in digital citizenship development centered on critical digital literacy (CDL), understood as the ability to evaluate and use digital information and technologies with criticality and responsibility. This paper presents an attempt to cultivate CDL in the curriculum of a critique and expression course at a higher education institution in Singapore. Informed by established critical thinking and critical digital literacy frameworks, the curriculum design was constructively aligned with two learning goals: (1) to critically question, analyze, and evaluate online information, and (2) articulate critical thoughts in multimodal communication modes. The efficacy of the curriculum design was evaluated based on the course feedback reports as well as anonymous pre- and post-course surveys administered over six consecutive semesters. The pre- and post-course surveys measured students' perceptions of their CDL and communication skills before and after taking the course. The survey results show increased self-reported growth in CDL and multimodal communication skills. However, the persistent skepticism about the relevance of the course, as reflected in the course feedback reports, underscores the importance of complementing curriculum design with strategic course branding, particularly in terms of positioning and messaging.

16:45-17:10
101125 | *Users' Behaviors of Posting and Commenting in Education-Related Subreddits*
Khadijah Alghamdi, Majmaah University, Saudi Arabia

This study investigates users' behaviors of posting and commenting in five education-related subreddits: r/Teachers, r/teaching, r/education, r/TeachingResources, and r/CSEducation. A dataset of 6,870 contributions (submissions and comments) was analyzed using Python to examine engagement scores, percentages of active users, posting behaviors, and commonly used words. Findings reveal notable differences among the subreddits. The r/Teachers community demonstrated the highest engagement score (11.7) and percentage of active users (2.1%), suggesting that question-based submissions generated meaningful interaction and professional support. Similarly, r/teaching showed strong engagement (8.2). In contrast, r/education, despite having a high number of submissions, yielded the lowest engagement score (0.40), indicating limited interaction around posted content. Both r/CSEducation and r/TeachingResources exhibited low participation and minimal growth, with few questions and low active-user percentages, underscoring the limited sustainability of these online communities. Word cloud analyses further highlighted the nature of discussions, with r/Teachers and r/teaching centered on classroom practices, r/education oriented toward broader policy issues, and r/CSEducation emphasizing computer science programming and training. Overall, the results demonstrate that while online communities on Reddit can serve as valuable spaces for professional support, their effectiveness depends on the type of contributions, the presence of active moderation, and the relevance of discussions to practitioners' needs. The study underscores the need for stronger, more sustainable online communities—particularly for computer science educators—where professional collaboration, knowledge exchange, and teacher development can be enhanced through active digital engagement.

15:55-18:00 | Live-Stream Room 5

Friday Online Parallel Session 3

ACE2025 | AI and Digital Literacy

Session Chair: Neslihan Köse

17:10-17:35

101427 | *Bridging the Gap: AI Attitudes and ChatGPT Literacy Among Pre-Service and In-Service EFL Teachers*

Erdi Şimşek, Bartın University, Turkey
Neslihan Köse, Bartın University, Turkey

AI-driven chatbots like ChatGPT have rapidly transformed language education by offering personalized and interactive learning experiences that support almost all stages of second language acquisition (Gass et al., 2020; Huang et al., 2023; Kasneci et al., 2023). ChatGPT can assist English as a foreign language (EFL) teachers in designing materials, assessing student work, and providing instant feedback, while also enhancing learners' motivation and improving core language skills (Ali et al., 2023; Huang et al., 2023), despite ethical concerns related to plagiarism, biases, and data privacy (Ray, 2023). To help teachers better adapt to this rapid transformation, this study investigates the AI attitudes and ChatGPT literacy of pre-service and in-service EFL teachers, along with their reported areas of use and challenges. A total of 153 Turkish participants completed the AI Attitude Scale (Grassini, 2023) and the ChatGPT Literacy in Language Education Scale (Ma et al., 2024). Additionally, two open-ended questions elicited qualitative insights. Findings revealed no significant differences in AI attitudes between pre-service and in-service EFL teachers; however, pre-service teachers demonstrated significantly higher ChatGPT literacy levels and the constructs. Gender-based analyses further indicated that male participants reported higher literacy levels than females. Qualitative findings confirmed notable differences between pre-service and in-service teachers, particularly in lesson planning and assessment. The results highlight the need for comprehensive and supportive training for in-service EFL teachers to effectively integrate ChatGPT into language education. Future research should explore diverse contexts and instructional settings to deepen understanding of teachers' engagement with AI tools.

15:55-18:00 | Live-Stream Room 6
Friday Online Parallel Session 3
ACE2025 | Education, Sustainability and Society
Session Chair: Lucia Munongi

15:55-16:20
97001 | *Crafting Climate Resilience: A Case for Integrating Indigenous Knowledge Through a Panay Bukidnon Student's Perspective*
Williza Cordova, University of San Carlos, Philippines
Monell John Cañizares, University of San Carlos, Philippines

This case study explores how a Panay Bukidnon college student negotiates Indigenous climate resilience practices (e.g., intercropping, disaster-resilient housing) within formal science education in Negros Occidental, Philippines. Despite national policies promoting Indigenous Knowledge Systems and Practices (IKSP), the student's narrative reveals systemic contradictions: curricular exclusion, social stereotypes, and colonial microaggressions suppress knowledge sharing while privileging Western scientific paradigms. Structural barriers—such as reliance on elders for transmission and internalized hierarchies—further marginalize Indigenous perspectives in classrooms. Yet, the student's experiences demonstrate the adaptability of Indigenous practices in urban settings, underscoring their pedagogical value for climate science (e.g., microclimate regulation as a teachable model of sustainability). The study identifies a critical gap: policies fail to address implicit biases in teacher training and curriculum design, which perpetuate epistemic inequities. The findings advocate for three actionable reforms: (1) decolonizing teacher training to challenge stereotypes, (2) co-developing curricula with Indigenous communities to align IKSP with climate science standards, and (3) creating "bridging pedagogies" that validate traditional knowledge as complementary to formal science. This case underscores that integrating IKSP requires addressing power dynamics, not just adding content. It advances the discourse by framing climate resilience as a process of cultural reclamation—where education becomes a site for both ecological and social justice.

16:20-16:45
96338 | *Policy into Practice: Examining Teachers' Knowledge as a Predictor of Teachers' Attitude Towards Child Protection Classroom Integration*
Floro Del Pilar III, Ateneo de Manila University, Philippines

The knowledge and attitudes of teachers regarding child protection policies (CPP) are critical for ensuring the safety and well-being of children. A number of studies have dwelt on the level of knowledge of teachers about child protection policies and their attitude towards the implementation of these policies. However, there is a dearth of studies looking at the different factors that affect the attitude of teachers toward integrating child protection policies into the teaching practices of teachers. In this regard, this study aimed to examine the teachers' knowledge of CPP as a predictor of their attitude towards integrating the policy into their classroom practices through a linear regression analysis. Using stratified sampling, teachers were randomly selected to participate in the study. The overall model was significant, $F(1, 157) = 90.2$, $p < .001$, $R2 = 0.365$. Knowledge of CPP explained 36.5% of the variance in the attitude towards integrating CPP. The unstandardized regression coefficient for knowledge was $B = 0.576$, $SE = 0.0606$, $t = 9.50$, $p < .001$, indicating that for every unit increase in knowledge, the attitude increases by 0.576 points. The standardized regression coefficient was $\beta = 0.604$, suggesting a positive and strong effect size. These findings suggest that a higher level of knowledge is associated with a better attitude towards integrating CPP. Thus, the teachers' knowledge of CPP is a significant predictor of attitude towards integrating CPP. Schools must draft seminar workshops that emphasize CPP knowledge and its applications to encourage practical implementations in schools.

16:45-17:10
98288 | *Supporting Education: How Can Asian Development Bank's Education Projects Be More Transformational?*
Ari Perdana, Asian Development Bank, Philippines
Michael Diza, Asian Development Bank, Philippines

The Independent Evaluation Department (IED) recently conducted an evaluation of the Asian Development Bank's (ADB) support for education in Asia and the Pacific. This study examined ADB's contribution to education outcomes, particularly assessing the effectiveness and ambition of its projects. Analyzing 21 project validation reports from 2011 to 2023, the evaluation classified project outcomes based on their reach—low, modest, high, and very high—as a measure of ambition. Findings revealed that while 78% of ADB's education projects were rated successful, only two-thirds were classified as effective, a rate lower than ADB's overall project portfolio. Additionally, 62% of projects set only modest outcome reach, with just 21% targeting high outcome reach. To enhance its impact, the evaluation argues that ADB must strengthen sector diagnostics and strategic planning at the country level. A systems-based approach is essential to addressing complex education challenges, ensuring projects move beyond infrastructure development to focus on learning quality, system-wide reforms, and strategic partnerships. By prioritizing transformational interventions, ADB can enhance the long-term sustainability and effectiveness of its education initiatives. This evaluation serves as a critical learning document, sparking discussions within ADB on improving project design and effectiveness. It also prompts a rethinking of evaluation methodologies, particularly how projects can be deemed successful yet still fall short in effectiveness. Moving forward, ADB's education strategy must emphasize ambitious, transformational interventions that drive meaningful and sustainable improvements in learning outcomes across the region.

17:10-17:35
96863 | *Caregivers' Views of the Risk Factors Impeding Implementation of Provision Rights in Children's Homes in Harare, Zimbabwe*
Lucia Munongi, University of Johannesburg, South Africa
Blessing Tendai Baloyi, University of Johannesburg, South Africa

Children's rights are a global topic of debate which has been under researched in some countries like Zimbabwe. In Zimbabwe, specifically, provision rights which ensure children's survival and holistic development have not been given enough attention in contexts such as children's homes. This article focused on caregivers' views of the risk factors impeding the implementation of provision rights of children in the early childhood development phase in seven children's homes in Harare, Zimbabwe. This study was guided by the interest theory. The study implemented a qualitative approach using a multiple case study design. Data were collected from 34 purposefully sampled caregivers from seven children's homes using semi-structured individual interviews. Views from the caregivers showed that poor funding and malfunctioning of the government's social protection programmes contributed to the poor implementation of provision rights in all the selected children's homes. Recommendations were made to minimize the associated risks and to promote the fulfilment of provision rights in the selected children's homes and in broader contexts.

15:55-18:00 | Live-Stream Room 6

Friday Online Parallel Session 3

ACE2025 | Education, Sustainability and Society

Session Chair: Lucia Munongi

17:35-18:00

97539 | *From Value to Action: A Critical Examination of Barriers to Democratic Participation in Global Sustainability Agendas*
Sara Aberkan, University of Mohamed the First, Morocco

Despite growing awareness of global sustainability challenges, public engagement and democratic participation remain limited. This persistent value-action gap, where individuals possess knowledge about sustainability but do not translate it into civic or political action, raises urgent questions about the effectiveness of global frameworks such as the Sustainable Development Goals (SDGs). This paper offers a critical theoretical exploration of how sustainability is framed in international policy discourse, particularly in relation to shared civil responsibility and democratic agency. Drawing on framing theory, the study examines how dominant narratives surrounding the SDGs tend to emphasize individual behavioral change while neglecting the structural and political dimensions of sustainability. Insights from critical pedagogy further highlight how education, while often positioned as central to sustainability, may fall short if it promotes awareness without cultivating critical consciousness or participatory agency. Through a synthesis of interdisciplinary scholarship, the paper critiques the prevailing representations of responsibility and citizenship embedded in sustainability discourse. It argues for a reframing toward models that emphasize collective agency, democratic participation, and systemic transformation. The study concludes with theoretical reflections and conceptual recommendations for reimagining sustainability education and policy as frameworks that support active civic engagement and empower individuals as agents of change. In doing so, it contributes to wider debates on how language and discourse shape public action in the context of global challenges.

15:55-18:00 | Live-Stream Room 7

Friday Online Parallel Session 3

ACE2025 | Teacher Education

Session Chair: Lualhati Dela Cruz

15:55-16:20

97672 | *The Employability of School of Teacher Education Graduates in the Wake of COVID-19*
Mark Denice Baquiran, Universidad de Dagupan, Philippines
Brylene Ann Baquiran, Universidad de Dagupan, Philippines
Raquel Pambid, Universidad de Dagupan, Philippines
Jann Alfred Quinto, Universidad de Dagupan, Philippines
Vivian Ocal, Universidad de Dagupan, Philippines

This study examined the employability of graduates from the School of Teacher Education (STE) at Universidad de Dagupan between 2019 and 2023, with a focus on the effect of the COVID-19 pandemic. Descriptive statistics were used and the likelihood ratio is a statistical test used to determine the significant association between the employment status and the source of income with the current monthly gross income. Data were gathered from 187 respondents, exploring their employment status, income levels, and the relationship between these factors. The results showed that while nearly half of the graduates secured full-time, regular jobs, a significant number faced unemployment (20.3%) and underemployment, often in part-time or contractual positions. The study found that employment type and the sector (private or government) were strongly linked to income levels, with full-time government jobs offering higher earnings. The analysis also looked at job satisfaction and employer evaluations. It revealed that employees reported low to moderate job satisfaction, with many feelings of dissatisfaction, likely due to the challenges of the pandemic. On the other hand, employers rated employee performance more positively, though some workers felt their contributions were not adequately recognized. Despite these challenges, the STE program succeeded in preparing graduates which helped them secure stable jobs, especially in a challenging job market. The study suggests that stronger career support and more partnerships with employers could improve job prospects for future graduates.

16:20-16:45

98188 | *Exploring Self-Regulated Learning: Insights into the Perspectives of Thai Lecturers and Preservice Teachers*
Sasanun Bunyawanich, University of Jyväskylä, Finland
Terhi Mäntylä, University of Jyväskylä, Finland
Sami Lehesvuori, University of Jyväskylä, Finland

Self-regulated learning (SRL) is beneficial for preservice teachers in all stages of their teaching careers, starting from their studies in teacher education to achieve academic goals, through their early teaching career for coping with school-setting problems, and as skilled teachers in promoting lifelong learning. The research aims to explore which are the elements of SRL found in teacher education. The Dual Processing Self-Regulation model is employed as the theoretical framework to understand the phenomenon. Internationally, limited research has been carried out to explore the perspectives of lecturers and preservice teachers on SRL. Online survey data acquired from a total of 278 respondents were analyzed. The results show elements of SRL that have been blended into teacher education programs, which are metacognition, emotion regulation, motivation (individual and group aspects), and available resources. The results can be used as a foundation for conducting further intervention research to improve elements of SRL of Thai preservice teachers.

16:45-17:10

97459 | *Developing Teacher Competencies in Basic and Vocational Education Within the Cooperative Education and Industry Network to Enhance Skills in Science, Mathematics, and Coding*
Sirimonpak Suwannakhun, King Mongkut's University of Technology Thonburi, Thailand
Sakesun Yampinij, King Mongkut's University of Technology Thonburi, Thailand
Sirawit Chaihang, King Mongkut's University of Technology Thonburi, Thailand
Pasapitch Chujai Michel, King Mongkut's University of Technology Thonburi, Thailand

This research project aims to develop the competencies of teachers in basic and vocational education within a cooperative education network involving the industrial sector. It focuses on enhancing skills in science, mathematics, and coding, as well as technological knowledge in areas such as robotics, artificial intelligence, and technological design. The project employs hands-on learning activities, including introductory programming through platforms like KidBright and Tinkercad, and involves collaborative curriculum development with key partners such as King Mongkut's University of Technology Thonburi, Khon Kaen University, the Office of the Vocational Education Commission, and the Bangkok Metropolitan Administration. The project is grounded in the principles of coaching and mentoring for teachers, aiming to transform their roles into leaders of 21st-century learning. It fosters a positive learning environment by integrating positive psychology within the framework of the Behavior Triangle to holistically develop learners' knowledge, skills, and attitudes.The findings can be summarized as follows (1)The quality of teacher competency development, as assessed by experts, was rated at a high level.(2)The effectiveness of activities designed to enhance science, mathematics, and coding skills was also rated at a high level.(3) Participant satisfaction with the activities was reported to be high overall. The outcome of the project demonstrates that the development of teacher competencies enables educators to design innovative learning activities aligned with the needs of the industrial sector, while also enhancing students' skills in science, mathematics, and coding to meet the demands of future technological change.

15:55-18:00 | Live-Stream Room 7

Friday Online Parallel Session 3

ACE2025 | Teacher Education

Session Chair: Lualhati Dela Cruz

17:10-17:35

100390 | *Enhancing Internship Support: Evaluating Student Teacher Performance for Program Development*

Lualhati Dela Cruz, Polytechnic University of the Philippines, Philippines
Sheryll Serrano, Polytechnic University of the Philippines, Philippines
Jedidia Eunice Peña, Polytechnic University of the Philippines, Philippines
Juanito Dela Cruz, Polytechnic University of the Philippines, Philippines

This study utilized a descriptive quantitative research design, employing an institutional research tool to assess the effectiveness of the Internship/OJT program in the PETE program at CHK. The respondents comprised 189 student-teachers assigned to various training stations across Metro Manila. Findings revealed that student-teachers were placed in academic institutions near their residences, with all completing the required 350 hours of training. Their performance was evaluated by cooperating teachers, receiving outstanding ratings in teacher personality (4.82), lesson planning (4.91), subject mastery (4.72), teaching methods (4.66), and classroom management before (4.80), during (4.77), and after instruction (4.75). Analysis of performance variations across training stations indicated significant differences in teacher personality ($p = 0.0012$, $F = 3.6042$), subject mastery ($p = 0.0329$), teaching methods, and classroom management before instruction. However, no significant differences were observed in lesson planning or classroom management during and after instruction. These findings suggest that student-teacher performance varies based on institutional assignments, particularly personality expression and subject mastery. The study underscores the importance of continuously assessing and enhancing internship programs to better prepare student-teachers for real-world teaching environments. Thus, an integrated internship development plan was proposed to further improve the performance of the Pre-Service Physical Education interns.

Notes

Virtual Poster Presentations

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ACE2025 Virtual Poster Presentations

Counselling, Guidance & Adjustment in Education

93337 | *The Role of Parents in Promoting Active Lifestyles: Raising Awareness and Overcoming Challenges*
Asnat Dor, Max Stern Academic College of Emek Yezreel, Israel

Parents play a vital role in promoting an active lifestyle for their children, serving as role models and providing encouragement. They influence children's physical activity by participating directly, modeling behaviors, and offering motivational and financial support. In a technology-driven society where daily needs are met effortlessly, maintaining an active lifestyle is challenging. Parental involvement is crucial for cultivating healthy habits, significantly impacting children's activity levels and overall health (World Health Organization [WHO], 2020; Tremblay et al., 2016).
Research Questions: How do parents perceive and prioritize an active lifestyle among daily responsibilities?
What challenges do parents face in encouraging physical activity? How do parents perceive their role in addressing sedentary behavior?
What strategies and resources do parents find effective in promoting active lifestyles?
Method: This qualitative phenomenological study utilized semi-structured interviews with 24 parents of children aged 6–12, recruited through social media and community networks. Key themes were identified using thematic analysis (Braun & Clarke, 2006).
Results: Parents acknowledged the value of an active lifestyle but often prioritized other activities. Effective strategies included establishing family routines, limiting screen time, and engaging in extracurricular sports. They also emphasized the importance of school involvement and access to practical resources to sustain these efforts.
Conclusion: The study underscores the critical role of parents in promoting active behavior. By identifying challenges and strategies, these findings can inform policies and programs that help families promote active, healthy habits in children.

97618 | *Experiences of Parents in Fostering Catholic Values in Their Children's Daily Lives: Inputs to Home and School Collaboration Enhancement*
Reimar Panti, Ateneo de Manila University, Philippines

In the history of Catholic Education, the Catholic Church has emphasized the importance of parents in the education of their children. Existing studies have shown that family involvement benefits students' academic and social development, overlooking the parents' participation in religious schools. To add to the growing body of literature on this field, this study aims to explore the experiences of parents in fostering Catholic values in their children's daily lives. Using a phenomenological design, the research involved five parents whose children are enrolled in Catholic grade schools within the Greater Manila Area. Guided by Albert Bandura's Social Learning Theory, thematic analysis was used to identify themes and sub-themes from their shared experiences. The findings reveal that simply teaching values is not enough because parents must model these values through consistent behaviors and routines at home. Additionally, the values parents themselves learned during childhood have a lasting impact on their children's character, which influences their decision-making processes and social interactions. The study concludes that Catholic values are values not limited to students and parents who are born and raised as a Catholic, but those who believe in the value of respect, responsibility, independence, and care for others and the environment. The study recommends that schools develop a values framework based on the experiences of parents, teachers, and other stakeholders to inform home-school collaboration policies and conduct future research on students' experiences with Catholic values to understand interrelationships.

Curriculum Design & Development

97084 | *Empowering Environmental Literacy Through Interdisciplinary Soil Science Education: Evaluating the Impact of the "Soilution" Curriculum on High School Students*
Pengfei Jiang, Zhuji Ronghuai Foreign Language School, China

This study investigates the effectiveness of "Soilution": Curriculum of Soil Science, an interdisciplinary educational program designed to promote environmental awareness and STEM competencies through the lens of soil health and sustainability. Rooted in the pedagogical frameworks of project-based learning, gamification, and hands-on experimentation, the curriculum addresses critical environmental challenges such as soil acidification while aligning with the United Nations Sustainable Development Goals (SDGs). The research adopts a mixed-methods approach to evaluate the curriculum's impact on high school students' learning outcomes and environmental attitudes. A quasi-experimental design was implemented with two groups: an experimental group engaged with the "Soilution" curriculum and a control group following traditional science instruction. Quantitative data were collected through pre- and post-intervention tests measuring students' soil science knowledge and environmental responsibility. Qualitative data were gathered from classroom observations, student interviews, and project artifacts to assess behavioral engagement and ecological consciousness.
Findings suggest that students who participated in the "Soilution" program demonstrated significantly greater improvements in conceptual understanding of soil chemistry, scientific inquiry skills, and personal commitment to environmental stewardship. The integration of creative and inclusive activities, such as miniature ecosystem modeling, sensory soil experiments, and soil pigment art, fostered deeper student motivation and interdisciplinary thinking. This study highlights the potential of context-based, SDG-oriented curricula to transform environmental education by bridging theory and practice. It offers practical insights for educators and curriculum developers seeking to embed sustainability and STEM in meaningful, culturally relevant ways.

98424 | *Implementing English Medium Instruction in Swedish Speech-Language Pathology Education: A Case Study on Inclusion and Learning*
Anna Eva Hallin, Karolinska Institutet, Sweden

In a globalized academic landscape, English Medium Instruction (EMI) is increasingly used to promote internationalization, such as student and teacher mobility. However, EMI presents challenges in balancing language proficiency, inclusion, and academic achievement, particularly in speech-language pathology (SLP) education, where cultural sensitivity and proficiency in the local language(s) are essential. This descriptive case study examines the implementation of EMI in the SLP program at Karolinska Institutet, Sweden, focusing on the course "Speech and Language Disorders in Children and Youth 2." Delivered in Swedish (2022–2023) and English (2024–2025), the course maintained consistent learning outcomes and instructor. Data from 127 students include final exam results, quantitative evaluations, and qualitative written feedback. Findings show comparable exam pass rates (80% Swedish vs. 81% EMI) and student-reported skill development (4.6 vs. 4.2) and self-assessed learning outcome achievement (4.2 vs. 4.0). The study outlines considerations when adopting an SLP curriculum to English and a descriptive qualitative analysis of student perceptions of EMI versus native-language instruction. Implications for inclusive, effective EMI in non-English language SLP programs are discussed in the light of recent research.

Education & Difference: Gifted Education, Special Education, Learning Difficulties & Disability

101141 | *The Relational Model in Perfectionism, Constructive Thinking, Cognitive Mindset, and Emotional Intelligence of Gifted Students*
Min-Ying Tsai, National Pingtung University, Taiwan

Perfectionism often makes students rudely achieve excellent results and easily feel nervous. If they achieve the goal, they might feel happy or never feel enough; otherwise, if they failed, they might be depressed or try again. The positive or negative results of perfectionism might affect students' cognitive mindset or constructive thinking. The purpose of the study was to explore the relationship among perfectionism, cognitive mindset, constructive thinking, and emotional intelligence of gifted students. The study investigated 908 gifted students from third grade to sixth grade in the study. Multiple dimensional perfectionism scale, cognitive mindset scale, constructive thinking scale, and emotional intelligence scale were adopted, and examined the structure-model fit of four variables by structural equation modeling. The study found that three kinds of perfectionism directedly or indirectly affected emotional intelligence through growth mindset or constructive thinking except rigid perfectionism.

Educational Research, Development & Publishing

97393 | *Comparative Analysis of AI/ML Models for Student Performance Prediction Using XuetangX MOOC Dataset*
Mahmoud AlFaress, Ministry of Education in Saudi Arabia, Saudi Arabia
Midhunchakkaravarthy Janarthanan, Lincoln University College, Malaysia
Chandra Kumar Dixit, Institute of Engineering and Technology, India
Omar Al Jadaan, Ras Al Khaimah Medical and Health Sciences University, United Arab Emirates
Satheesh Babu, Lincoln University College, Malaysia
Shashi Kant Gupta, Chitkara University Institute of Engineering and Technology, india

In this paper, we provide a thorough study on the AI/ML models for predicting student performance in MOOCs using the XuetangX MOOC dataset. An early detection of students-at-risk is important due to the increasing use of online learning systems in order to produce better learning results. We compare six models – Random Forest, Support Vector Machine, Logistic Regression, Convolutional Neural Network, Long Short-Term Memory, and Transformer –in their predictive ability for student dropout in MOOCs. This comparative analysis is unique due to its focus on the large-scale XuetangX MOOC dataset, providing insights into model performance across diverse feature sets and offering practical implications for early warning systems in a specific regional context. Our findings, however, demonstrate that traditional machine-learning models outperform deep learning approaches (AUC 0.58-0.63 vs. 0.50-0.56), with Logistic Regression achieving the highest performance while maintaining better interpretability. Feature importance analysis reveals that course progress rate, quiz success rate, and session duration play the most significant roles in student success prediction. We further demonstrate the practical application of these models in an early warning system that provides as-recorded personalized interventions. The results illuminate the trade-offs between model complexity, performance, and interpretability in Educational Data Mining (EDM), and have important implications for learning analytics researchers and educational technologists interested in developing AI-supported student support systems.

Foreign Languages Education & Applied Linguistics (including ESL/TESL/TEFL)

101488 | *Challenges of Spanish as a Third Language in Slovak University Students*
Andrea Kóňová, University Constantine the Philosopher in Nitra, Slovakia

Foreign language learning is a complex process that involves mastering different levels of language (grammar, meaning, and sound) and integrating them to effectively perceive and produce language. The acquisition of a third language (L3) is specific in that it is influenced by L1 and L2. This study focuses on Spanish, L3 commonly learned in Slovakia, L1 being Slovak and L2 being English. The primary aim is to investigate the development of language proficiency, specifically in oral production, among Spanish learners over a period 1-2 years. The research adopts a case study approach as it allows an in-depth examination of selected sample over an extended time frame. The sample consists of Slovak university students of Teacher training program of Spanish language and literature during their bachelor studies, including students who started to study Spanish only after enrolling in the study program. It covers various CEFR levels – A1 to B2 at the beginning of the study. The methods used are comparative analysis of speech recordings and long-term observation. The research questions are: How did students' speech evolve over the course of one year? What long-lasting problems can be identified? What strategies can be proposed to address these challenges? In addition to varying rates of progress, the study identifies several persistent issues in students' oral production that remained unresolved within the study period. Possible interventions are suggested to address these issues and promote more effective language acquisition. This text was created within the project UGA III/7/2025 Fonosyntax in foreign language teaching.

ACE2025 Virtual Poster Presentations

Interdisciplinary, Multidisciplinary & Transdisciplinary Education

96825 | *Nursing Students and Nurses' Voices on Interprofessional Collaboration Education*
Hee-Young Song, Yonsei University, South Korea
Kyoung A Nam, Hallym University, South Korea

This study aimed to explore perspectives on interprofessional collaboration (IPC) and education (IPE) among nursing students and nurses whose needs and opinions are to be reflected to develop an IPE program guaranteed working impacts. Qualitative data were collected using two focus groups (nursing students and nurses) with a semi-structured interview technique. Participants were purposively recruited from W Province in South Korea. Participants in this study comprised nursing students who had enrolled at least six semesters and had prior clinical practicum experience, as well as registered nurses who had more than five years of clinical experience and were serving as clinical preceptors. The digitally recorded audio data were transcribed verbatim and analyzed by two researchers using qualitative content analysis procedure proposed by Graneheim and Lundman (2004). Three categories and eleven sub-categories were emerged as follows: elements of collaboration (sense of connectedness, communication, shared goal of patient care, professional responsibility and accountability), collaborative skills (clarification, mutual supports, patient-centeredness, prioritizing), IPE simulation program (topics aligned with educational objectives, teaching and learning media, facilitating factors). The participants' perspectives on IPC aligned with the findings of prior research, particularly emphasizing the crucial role of respectful communication, including detailed suggestions regarding successful implementation of an IPE simulation program. These findings provide the insights into the feasible and relevant IPE program for nurses, utilizing simulation that offers immersive learning experiences, in order to maximize its strengths as an alternative to supplement practice with real individuals by providing practical experience similar to actual practice.

Mind, Brain & Psychology: Human Emotional & Cognitive Development & Outcomes within Educational Contexts

96228 | *Prevalence of Poor Sleep Quality and Its Related Factors Among University Students: A Cross-sectional Study*
Manvi Upadhaya, Gulf Medical University, United Arab Emirates
Shatha Al-Sharbatti, Gulf Medical University, United Arab Emirates

Poor sleep quality is a prevalent issue among university students globally, impacting academic performance, mental health, and overall well-being. This issue is particularly relevant in the United Arab Emirates (UAE), where unique sociocultural and lifestyle factors may contribute to sleep disturbances. This study aimed to determine the prevalence of poor sleep quality among university students in the UAE, identify the factors associated with and independently predicting poor sleep quality in this population and assess the mental health impact of poor sleep quality among students. A cross-sectional study was conducted among students at Gulf Medical University (GMU) in Ajman, UAE. Data was collected using the Pittsburgh Sleep Quality Index (PSQI), the Athens Insomnia Scale (AIS), the Perceived Stress Scale (PSS), and a researcher-developed questionnaire assessing socio-demographic, educational, lifestyle, and health factors. Data was analyzed using chi-square tests to assess associations and logistic regression to identify independent predictors of poor sleep quality. The calculated sample size was 562. Poor sleep quality (PSQI > 5) prevalence was 32%. Significant associations included age, living arrangement, study hours, screen time, caffeine, water intake, health conditions and BMI. Independent predictors were health conditions and caffeine. This study highlights the substantial prevalence of poor sleep quality among university students in the UAE and identifies several modifiable risk factors. These findings underscore the need for targeted interventions to promote healthy sleep and improve the overall well-being of university students.

97373 | *Exploring the Effects of Generative AI-assisted Emotional Support on College Students*
Rayen Jui-Yen Chang, National Chengchi University, Taiwan

The rapid development of generative artificial intelligence (AI) offers new opportunities for emotional support in mental health, particularly for college students facing multi-dimensional challenges during a crucial period of emotional and cognitive development. However, existing research has yet to fully examine the role of generative AI in students' emotional adjustment and its connection to cognitive development. Drawing on psychological stress and coping theory, this qualitative exploratory study examined how generative AI affects college students' perceptions, attitudes, and acceptance of AI-assisted emotional support. The study was conducted in a university setting, with 20 undergraduate participants (9 males, 11 females) from humanities, social sciences, and natural sciences, selected based on prior psychological stress experience and use of generative AI tools for emotional support. Semi-structured interviews explored students' perceptions and attitudes toward AI. Data were analyzed using thematic analysis to identify key patterns in coping strategies and emotional regulation. Our research findings revealed that AI enhances awareness of stressors and facilitates cognitive reappraisal, helping reduce negative emotions. AI supports emotional regulation strategies such as relaxation and positive thinking, alleviating anxiety and stress. Students used AI for problem-focused coping, including finding solutions and planning. While participants generally found AI helpful and nonjudgmental, concerns about empathetic limitations, privacy, and overreliance emerged. Acceptance varied with self-efficacy and familiarity with technology. This study emphasizes generative AI's potential as a complementary tool for stress management and informs mental health initiatives in higher education. Future research can explore longitudinal effects to understand evolving student experiences over time.

ACE2025 Virtual Poster Presentations

98646 | *Evaluating the Spillover Effects of an Ageism Reduction Intervention on Other Social Biases*
Yuho Shimizu, Seijo University, Japan

There is a growing need to reduce ageism toward older adults. Prior studies have developed interventions that present a brief explanatory text emphasizing that “everyone will become an older adult someday” and introducing empirical findings from Stereotype Embodiment Theory. While such interventions can reduce ageism, they may unintentionally increase prejudice toward other groups. This could occur if the message is misinterpreted as implying that it is acceptable to hold biases against social groups one is unlikely to join. Therefore, the present study examined whether this type of intervention might inadvertently reinforce racism, sexism, or ableism. A total of 564 Japanese participants took part in an online experiment and were randomly assigned to either an experimental group (n = 289) or a control group (n = 275). The experimental group read the explanatory text described above, while the control group read an unrelated passage. To test group differences, Bayesian analyses were conducted to support the null hypothesis of no effect. Bayesian regression analyses, controlling for age and gender, showed no group differences in racism (β = -.12, 95% Credible Interval [CI] [-.29, .05], Bayes Factor [BF] = 0.57), sexism (β = -.01, 95% CI [-.17, .15], BF = 0.21), or ableism (β = -.09, 95% CI [-.25, .08], BF = 0.37). These results suggest that the intervention based on Stereotype Embodiment Theory does not reinforce other forms of prejudice. Therefore, the intervention developed in previous research should be actively utilized in the future to reduce ageism.

Notes

Virtual Presentations

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ACE2025 Pre-Recorded Virtual Presentations

Adult, Lifelong & Distance Learning

97311 | *Co-Designing Digital Learning Materials: A Case Study in Language and Culture*
Simon Paxton, Komazawa University, Japan
Akiko Hiratsuka, University of Technology Sydney, Australia

This presentation examines the collaborative design of online learning materials for an intermediate-advanced level course offered at the University of Technology Sydney: Transcultural Communication in Japanese. We co-developed digital content to deepen students' understanding of Japanese language and culture. This project documents the collaborative process of developing course content for flipped, blended and online courses. Digital content provides learning resources which can cater to the needs of diverse student cohorts, including online learners. We argue that collaboration between academic and professional staff, such as learning designers, enhances the quality of digital materials and the students' learning experience.

Assessment Theories & Methodologies

93347 | *Both Are Worse: Nonword Repetition Tasks with High vs. Low Linguistic Loads as Clinical Markers for Language(-related) Impairments*
Eugen Zaretsky, Marburg University, Germany
Benjamin P. Lange, IU International University of Applied Sciences, Germany
Christiane Hey, Marburg University Hospital, Germany

Purpose. Nonword repetition (NWR) tasks are widely used for the detection of children with deficits in phonological short-term memory (PSTM). Such deficits can be indicative of language(-related) medical impairments with or without comorbidities. However, previous studies showed a considerable influence of children's language competence on NWR performance. Therefore, some language-unspecific NWR tasks were developed that should minimize linguistic interferences and provide a more direct access to PSTM. Methods. In the current retrospective study, language-specific and language-unspecific NWR tasks were compared regarding their associations with children's language skills and language(-related) impairments. Ten samples of four- and five-year-old monolingual and bilingual German children that were tested either with language-specific or language-unspecific NWR tasks were compared regarding linguistic interferences, associations between NWR performance and language(-related) medical issues as well as possible influence factors on the NWR scores. Sample sizes varied from 161 to 2,750. Seven NWR tests were utilized. Results. In most cases, NWR performance depended on German articulation/phonotactics skills and was hardly associated with language(-related) impairments. Monolinguals outperformed bilinguals in language-specific nonwords under condition of significantly better German articulation skills. Language-unspecific nonwords minimized the influence of language competence on the NWR performance. However, this "culture-fairness" did not result in higher associations with language(-related) medical issues in comparison with language-specific nonwords. Discussion. Neither language-specific nor language-unspecific NWR tasks contribute to the diagnostics of language(-related) impairments. Independent cut-off criteria for such impairments based on the NWR performance would be misleading due to strong linguistic interferences even in case of comparatively language-unspecific nonwords.

96838 | *Silent Parents: What We Do Not Know in Language Screening Programs About Sociodemographic Conditions of the Language Acquisition*
Eugen Zaretsky, Marburg University, Germany
Benjamin P. Lange, IU International University of Applied Sciences, Germany
Christiane Hey, Marburg University Hospital, Germany

Nowadays, large-scale language screening programs for children are introduced in many regions of Germany and other countries. To quantify possible unfavourable conditions of the language acquisition, questionnaires for parents and/or kindergarten teachers are often used. Missing questionnaires may distort results of language testing due to unknown sociodemographic or medical conditions of the language acquisition. The current study analysed profiles of children with missing questionnaires to scrutinize whether such missing data are a matter of chance or follow certain statistical patterns. A sample of 2,700 German kindergarten children was re-analysed retrospectively. All children were tested with the language screening "Kindersprachscreening" ("Language screening for children"; KiSS.2), including questionnaires for parents (QP) and kindergarten teachers (QT). Both questionnaires were missing for 87 children (3.2%), only QP for 156 (5.8%), only QT for 26 (1.0%). QP were not filled out for children who acquired German under unfavourable sociodemographic conditions: non-attendance of associations and nursery schools, late age of the German language acquisition, no German spoken at home etc. Such children usually lagged behind in the acquisition of German. QT were more often filled out in evangelical kindergartens than in other kindergartens. QP were missing for children who acquired German under unfavourable sociodemographic conditions (medical conditions were also analysed but yielded no significant results). Missing QT were not associated with any characteristics of children or parents. Instead, kindergartens owned by the Evangelical Church delivered more QT than those owned by the Catholic Church and by cities/towns/villages, probably, due to organisational reasons.

97605 | *Achieving a Transparent and Equitable Assessment Model for Student Collaborative Thesis Film Production*
Khalid Al Mkhlaafy, Lasalle College of the Arts, Singapore

This presentation will chart the journey in a holistic, production oriented BA Film programme in art college to overcome the challenges associated with the assessment of the collaborative final year thesis film in order to create a more transparent and individual student contribution oriented assessment framework.As the college aimed to transition to university status there was a requirement, as articulated through external examiner reports, to shift from a generic assessment model which evaluated the thesis film as a whole to one which was more individualised, transparent and equitable. The new framework focused on the main roles, such as screenwriting, producing, directing, cinematography, editing etc., while also containing an assessed component for self-reflection and collaborative engagement. The presentation will detail how a number of strategies were used including programme development meetings, lecturer/student group discussion and brainstorming sessions, as well as industry consultations, in order for the development team to formulate a clear and concise assessment criteria framework. Key concepts such as equitability and transparency from a student perspective were major guiding principles in the endeavour, while issues relating to feasibility of implementation as well as efficiency for all assessors, also had to be taken into consideration. The presentation will also cover how a variety of both qualitative and quantitative methodologies were employed in order to assess the effectiveness, rigour and transparency of the assessment framework changes, including bi-annual student module surveys and programme review meetings, as well as annual external examiner evaluations and reviews.

101317 | *Redesign of Reflection as an Assessment for Service-learning Programs*
Exxon Ryan Yu, Xavier School, Philippines
Roy Allan Tolentino, Ateneo de Manila University, Philippines
Marie Nathalie Ting-Ouano, Ateneo de Manila University, Philippines

Service-learning programs have become staples of school curricula as a way of developing students into competent, responsible, and civically-oriented and -engaged citizens. Assessment in service-learning tends to rely on the process of reflection as a key component, through its potential to aid students in meaning-making and metacognitive integration. While the importance of reflection is paramount, assessing the efficacy of reflection introduces a number of risks and problems: vagueness of outcomes and indicators; shared understanding of content; authenticity; timeliness of feedback; and validity as an assessment. In this paper, we propose a revised framework for integrating reflection processes into service-learning courses, with a clearer metacognitive approach, an emphasis on dialogical learning, and a clearer understanding of milestones and indicators. This redesign aims to foster reflection as a skill developed throughout the course, and is capable of transfer to disciplines outside of the classroom.

101359 | *Barriers to Effective Enactment of AfL*
Roszalina Binte Rawi, Nanyang Technological University, Singapore

Assessment for Learning (AfL) has been widely recognised as a powerful pedagogical approach that promotes student agency, deeper learning, and formative feedback. Yet, the effective enactment of AfL practices often encounters significant barriers at the classroom level. This study investigates the challenges faced by teachers in implementing AfL in Malay language classrooms within Singapore primary schools. Drawing on survey responses and classroom observation data, the research identifies key obstacles that hinder teachers' ability to fully integrate AfL principles into their daily practice. Findings reveal that barriers operate at multiple levels: structural constraints such as curriculum pacing and assessment demands; pedagogical challenges including limited expertise in designing AfL strategies; and cultural factors, where classroom norms and student expectations influence teachers' practices. To analyse these barriers, the study employs Lewin's Change Theory as a conceptual lens. Lewin's model of unfreezing, changing, and refreezing provides a useful framework for understanding how groups—rather than individuals—experience and respond to change. By situating teachers within a broader system of expectations, accountability, and cultural practices, this framework highlights how the process of adopting AfL is shaped not only by teacher willingness but also by the collective readiness of schools and classrooms to embrace change. The paper argues that supporting teachers in overcoming these barriers requires systemic alignment across policy, school culture, and professional learning. Without addressing these contextual dynamics, AfL risks being enacted superficially rather than meaningfully embedded in classroom practice.

Challenging & Preserving: Culture, Inter/Multiculturalism & Language

100502 | *Linking Theory to Lived Experience: A Flipped Classroom Approach to Intercultural Learning*
Angus Cheung, Hong Kong Baptist University, Hong Kong

In today's globalised world, it is crucial for university students to develop intercultural competence. This presentation reviews the design and implementation of a flipped classroom model for a cultural exchange course at a university in Hong Kong. The hybrid course on cultural awareness integrates self-paced online modules on intercultural theories with face-to-face sessions facilitated by student cultural ambassadors.

Grounded in Kolb's Experiential Learning Theory and Bloom's Taxonomy of Learning, this course engaged a diverse cohort of 60 students, including both local and international students from across Asia and Europe. Analysis of course evaluations demonstrates that this approach effectively connects abstract concepts to real-life experiences, which leads to increased student engagement and self-reported gains in cultural awareness. The presentation will showcase materials co-created by cultural ambassadors and the instructor to provide attendees with practical strategies for implementing this model in their own contexts.

101507 | *Adolescent Voices in Digital Ecologies: Agency, Belonging, and Educational Responses*
Maria Puertas, Universidad Autónoma de Madrid, Spain

Digital platforms have rapidly become central spaces where adolescents negotiate identity, belonging, and peer relationships. Applications such as WhatsApp, TikTok, Instagram, and Discord structure everyday interactions, shaping discourses marked by immediacy, multimodality, and constant connectivity. While these ecologies can foster creativity and solidarity, they also give rise to subtle risks, including symbolic exclusion—discursive practices of marginalisation enacted through silence, irony, or digital humour—that significantly affect young people's emotional well-being and social integration. This study examines the communicative practices of Spanish secondary school students in online contexts, drawing on discourse-analytic approaches to identify dominant patterns of interaction, the emergence of conflict, and strategies of agency and resilience. Findings highlight how adolescents both reproduce power relations and experiment with new forms of expression that challenge exclusion and foster inclusion. The educational implications are critical. Current approaches to digital literacy remain too focused on technical proficiency, overlooking the cultural, emotional, and ethical dimensions of online communication. This paper argues for a pedagogy that integrates critical discourse awareness, emotional education, and intercultural reflection. Such frameworks would enable teachers to recognise hidden forms of exclusion while empowering adolescents to engage in inclusive and empathetic communication. By framing adolescent voices as both vulnerable and transformative, the paper positions classrooms as key arenas for cultivating critical digital literacies that prepare young people to navigate digital ecologies responsibly, creatively, and as active citizens.

Counselling, Guidance & Adjustment in Education

97348 | *Learning Blocks: Teaching Strategies for the Digital Mind*
Stefano Caggiano, Istituto Marangoni, Italy

This paper introduces the Learning Blocks Method as a structured response to the emerging cognitive and relational deficits observed in digital natives. The first part of the study examines the root causes that compromise the effectiveness of traditional teaching methods for this generation. A widespread form of "social functional illiteracy," shaped by years of interaction mediated through social media, has eroded students' ability to manage real-world interpersonal dynamics, weakening the foundation of the teacher-student relationship. At the same time, prolonged exposure to echo chambers fosters psychological fragility, making learners less resilient to frustration, contradiction, and cognitive effort. Furthermore, the constant activation of short-term memory—demanded by rapid digital multitasking—has progressively weakened long-term memory consolidation, undermining the ability to retain and integrate complex knowledge over time. In response to these challenges, the second part of the paper presents the Learning Blocks Method, an instructional model designed to align educational practice with the cognitive and behavioral characteristics of digital natives. It proposes: a) reframing the teacher-student relationship using team management principles, establishing a collaborative dynamic that can withstand poor social functioning; b) it restructures lesson content based on cognitive load theory, carefully calibrating information flow to avoid overload and sustain attention; c) it integrates spaced repetition into course architecture to support long-term memory and reinforce knowledge retention (in doing so, the method positions the course as part of the student's extended cognitive system).

97369 | *Delegating Tasks, Preserving Relationships: School Counselors' Perspectives on the Implementation of Generative AI*
XingZi Yu, National Chengchi University, Taiwan
Yong-Qin Hu, National Chengchi University, Taiwan
Fu-An Shieh, National Chengchi University, Taiwan
Ya-Ru Hsu, National Chengchi University, Taiwan

This qualitative study explores how Taiwanese school counselors perceive and utilize generative AI tools (e.g., ChatGPT, Gemini) within their educational practice. Using thematic analysis of in-depth interviews, the study identifies three primary functions of AI in the counseling context: reducing cognitive load in administrative documentation, supporting lesson and activity design, and serving as a reflective partner in case discussions. While counselors acknowledged the practical benefits of AI in streamlining tier-1 support tasks, they simultaneously raised concerns about misinformation, overreliance, and the erosion of critical thinking and human connection. Rather than resisting AI, counselors actively defined its appropriate role within a multi-tiered support system, reserving human expertise for higher-level relational work. Participants emphasized the importance of AI literacy training, data privacy protocols, and gradual, context-sensitive implementation. This study highlights how front-line educators negotiate the affordances and boundaries of AI, revealing that meaningful AI integration requires not only technological readiness but also pedagogical and ethical agency.

100943 | *Rewriting Success: How Generative AI Is Shaping New Definitions of Career Achievement*
Ma. Asuncion Clara Pantaleon, De La Salle University Manila, Philippines
Arlyn Napenas, De La Salle University Manila, Philippines

Generative artificial intelligence (GenAI) integration into work life is transforming how early-career professionals define and pursue success. This qualitative, phenomenological study investigates how individuals in the early stages of their careers, immersed in AI-enabled environments, construct evolving notions of career success. Using purposive sampling, the study engaged ten participants—five females and five males—who graduated from Academic Year 2022 onwards, represent diverse career fields, and are currently employed or actively seeking work. Semi-structured interviews explored their lived experiences, with thematic analysis guided by Career Construction Theory, which views careers as self-constructed realities through which individuals make sense of their experiences. It emphasizes how people build their careers by using their personal stories, themes, and life experiences to adapt to vocational challenges. This focuses on adaptability, storytelling, and how individuals' personal narratives shape their professional paths, and the Protean Career Model which states that a career path is driven by the individual, not the organization, and that it is guided by a person's intrinsic values and a desire for psychological success, such as personal fulfillment and well-being. Findings reveal that GenAI workplace adoption contributes to a shift from traditional extrinsically oriented markers such as job stability, salary, and title, towards more intrinsic adaptive, and self-directed indicators, like autonomy, continuous learning and ethical AI use, while still preserving creativity and empathy in AI-mediated work. These results affirm protean and boundaryless orientations shaped by technological disruption, indicating the importance of responsive, future-ready career development programs that integrate human-centric values with AI-era competencies.

ACE2025 Pre-Recorded Virtual Presentations

Curriculum Design & Development

96387 | *Developing Self-Determined Learning Using a Blended Learning Model that Harnesses the Potential of Collaborative Groups*
Kate Lewis, Manukau Institute of Technology, New Zealand

This research addressed the importance for educators to develop self-determined learning and empower students to take ownership of their learning in the contemporary educational landscape. Reflections highlighted that there were gaps in understanding and application of self-determined learning among teachers and students, prompting the development of this research, which fostered self-determined learning through a blended learning model that harnessed the potential of collaborative groups. Conducted in an innovative learning environment in a South Auckland school, students were interviewed, observed, and samples of their work were taken. This research explored the implementation and impacts of the blended learning model and collaborative groups, demonstrating reduced dependency on teacher support and enhanced collaborative dispositions among students. It highlighted the importance of ongoing research into self-determined learning and the evolving role of teachers in facilitating it. The findings also highlighted the importance of shared responsibility between teachers and students in fostering self-determined learning. Overall, this research contributed to understanding and improving self-determined learning through carefully structured group interactions, assigned group roles, and reflective practices.

97410 | *STEM Teaching Readiness in Hong Kong: A Decade of Insights from the Modified Theory of Planned Behavior*
Ka Yan Chung, The Hong Kong Polytechnic University, Hong Kong
Henry Ma, The Hong Kong Polytechnic University, Hong Kong

This study investigates the readiness of primary and secondary school teachers in Hong Kong to implement STEM education, nearly ten years after its formal policy introduction. Grounded in a modified Theory of Planned Behavior, the research explores five key constructs: attitudes toward STEM, perceived systemic barriers, self-efficacy, affective conditions (as a proxy for intention), and STEM teaching behaviors. A quantitative survey was conducted with 119 teachers using convenience and snowball sampling. The results revealed that attitudes significantly predicted affective readiness ($\beta = 0.544$, $p < 0.001$), and affective readiness in turn strongly influenced actual STEM teaching behaviors ($\beta = 0.592$, $p < 0.001$). Perceived systemic barriers also had a surprising positive influence on behavior ($\beta = 0.303$, p 0.05). The model accounted for 56.9% of the variance in affective readiness and 43.5% in teaching behavior, indicating moderate to strong explanatory power. Additional analysis showed that related training and experience significantly enhanced readiness ($p < 0.05$), regardless of gender or school level. The findings have practical implications for curriculum designers and school leaders, suggesting that professional development should integrate emotional readiness and institutional resilience as central components of STEM implementation strategies.

Design, Implementation & Assessment of Innovative Technologies in Education

97544 | *ICT Facilities and Students' Awareness of Virtual Assessment Indicators-moderated Mediation Roles of University Type and Lecturers' Self-Efficacy*
Israel Olasunkanmi, University of Ibadan, Nigeria
Adenike Emeke, University of Ibadan, Nigeria
Joshua Oluwatoyin Adeleke, University of Ibadan, Nigeria
Gbenga Adewale, University of Ibadan, Nigeria
Taiwo Oladipo-Abodunwa, University of Ibadan, Nigeria
Olutayo Omole, University of Ibadan, Nigeria

Adoption of Information and Communication Technology (ICT) tools in teaching and learning process is more popular with the evolving digital tools and platforms in the virtual learning-spaces which provides opportunities for assessing students' learning outcomes. However, successful adoption of the virtual assessment mode in universities depends largely on certain factors including students' awareness of assessment indicators, perception of usefulness and ease-of-use, attitude, intention to use, University type and lecturers' self-efficacy to integrate virtual assessment. This study, therefore, investigated relationships between ICT facilities and students' awareness of virtual assessment indicators, university type and lecturers' self-efficacy to integrate virtual assessment. It also investigated the moderating effect of the relationship between ICT facilities and students' awareness of virtual assessment indicators, as well as the mediating role of lecturers' self-efficacy on the relationship between university type and students' awareness of virtual assessment indicators. Data collected were analysed using the Hayes Process Macro- Model 7- Moderated Mediation. Results showed that the indirect impact of ICT facility on students' awareness of virtual assessment indicators through lecturers' self-efficacy to integrate virtual assessment was moderated by university type/ category as indicated by the index of moderated mediation (index =-0.070, 95% CI = [-0.490/0.430]) since the 95% does not include zero. The study concludes that lecturers' self-efficacy and university category are germane to successful virtual assessment in higher institutions. It is recommended that the National University Commission should come up with a benchmark on the number of ICT facilties in each university based on number of lecturers and students.

ACE2025 Pre-Recorded Virtual Presentations

97547 | *Technology and Nudge Theory Applied to Data Analytics: Evaluating the Impact of AI-Driven Pedagogical Interventions in Higher Education*
Edinson Delgado, Universidad Autónoma de Occidente, Colombia
Madeline Melchor, Universidad Autónoma de Occidente, Colombia
Johann Ospina, Universidad Autónoma de Occidente, Colombia
William Delgado, University of Chicago, United States

This study presents the findings of the research project "Technology and Nudge Theory Applied to Data Analytics," which evaluated the effectiveness of artificial intelligence (AI)-based educational technologies—specifically, ChatGPT—in enhancing the teaching of statistics and the development of statistical thinking among undergraduate students. The project was carried out within the Marketing and International Business program at Universidad Autónoma de Occidente in Colombia. The research is grounded in the increasing need for statistical literacy in business education, where data-driven decision-making, risk assessment, performance measurement, and adaptation to global market dynamics are essential competencies. Recognizing this, the study aimed to determine how AI tools can strengthen these skills in a practical classroom context. The project employed an experimental design involving control and treatment groups, where ChatGPT was integrated into classroom activities for the treated cohort. The objective was to assess whether AI-supported pedagogical interventions could significantly improve students' engagement and performance in data analysis and statistical reasoning. The research has been successfully completed, and data collection has concluded. The results provide empirical evidence on the role of AI in supporting domain-specific skill development in statistics and data analytics. Partial findings suggest that AI-driven educational tools not only enhance student participation and motivation but also contribute meaningfully to conceptual understanding, positioning AI as a valuable asset for innovation in higher education pedagogy.

97905 | *A Brunei Case Study on Developing Metacognitive Reading Skills in Primary Students Through AI-Powered ReadTheory*
Siti Norazimah Mohammad, Dato Othman Primary School, Brunei

Building on insights from the earlier NextGen Reader Program, this classroom-based study investigates how the AI-powered platform ReadTheory supports the development of three key metacognitive skills: planning, monitoring, and reflecting, among 120 primary students (Years 3 to 5) in a Bruneian government school. ReadTheory is a free, web-based adaptive reading platform that offers automatically leveled texts and comprehension quizzes based on each student's reading ability. Aligned with Brunei's Ministry of Education Strategic Plan and the National Digital Transformation Plan, this platform runs as a 12-week intervention program, which involved 30 minutes as reading sessions and facilitated by a literacy coach. Students participated in adaptive reading practice alongside structured metacognitive routines such as setting reading goals (e.g. complete two passages with scores > 70%), recorded vocabulary and quiz scores in logbooks, and used ReadTheory's explanation tools to reflect on incorrect answers. A mixed-method study was used to collect quantitative data from ReadTheory scores and Lexile pre/post assessments, with qualitative data collected through open-ended surveys from students and teachers. The findings found increased student engagement with improved reflective reading habits. Students who consistently applied metacognitive strategies showed improvement in their Lexile reading scores. While the short-term findings appear encouraging, it is recommended that future research conducted examine long-term impact and learning patterns across broader range of student groups with bigger sample sizes. The current study indicates how integrating adaptive AI-powered reading platforms with structured metacognitive guidance and teacher support may enhance literacy outcome and promote independent learning among primary students.

100638 | *Exploring TikTok as a Learning Resource in Maritime Higher Education: Educator Perspectives and Practices*
Aung Myin Moe, International Executive School, France
Min Min Tun, International Executive School, France
Selvi Thazin Win, International Executive School, France
Zina Kyriakou, International Executive School, France

While social media platforms have increasingly been adopted across various educational disciplines, less is known, from an empirical perspective, about their application within maritime higher education. This pioneering study examines the emerging phenomenon of TikTok use among maritime educators, representing one of the first empirical investigation into social media integration within this traditionally conservative field. A qualitative research design was employed, conducting semi-structured interviews with 12 maritime educators across international institutions who have begun creating TikTok content for educational purposes. Participants represented diverse maritime specializations including navigation, marine engineering, port operations, and maritime law. Interview data were analyzed using reflexive thematic analysis, revealing four key themes: (1) democratizing maritime knowledge beyond traditional maritime academies, (2) developing micro-learning approaches for complex shipboard procedures and emergency protocols, (3) engaging digitally native students entering the seafaring profession, and (4) navigating institutional resistance within hierarchical maritime education structures. The study reveals innovative educational practices including the use of TikTok's short-form video format to demonstrate intricate maritime procedures typically requiring hands-on shipboard experience, creation of virtual vessel walkthroughs for land-based students, and development of maritime safety mnemonics through engaging visual content. However, significant challenges emerged including concerns about maintaining the seriousness of maritime safety education while creating accessible content, preserving professional standards, and overcoming institutional skepticism within a field where tradition and hierarchy remain paramount. This groundbreaking research establishes foundational knowledge about social media's potential role in maritime education, offering crucial insights for maritime institutions considering digital pedagogical innovations in an increasingly technology-driven maritime industry.

ACE2025 Pre-Recorded Virtual Presentations

100941 | *Discussing ChatGPT in the Landscape of Students' Soft Skill Fostering: A Bibliometric and Content Analysis*
Thu-Phuong Hoang, FPT University, Vietnam

Since its launch, ChatGPT has prompted an extensive debate among scholars and educators regarding its benefits and impediments to the development of students' soft skills. Aiming to provide a comprehensive overview of this dynamic, this study performed a dual approach, combining bibliometric and content analysis. A total of 136 peer-reviewed articles from Web of Science published between 2022 and April 2025 were analyzed. The bibliometric analysis revealed a rapid growth in this field, with significant research originating from China, Taiwan, Saudi Arabia, and the United States. Content analysis of 102 empirical studies then delved into research subjects, methods, and key themes. A significant gap in research on K-12 students was discovered, as the majority of studies targeted higher education stakeholders. Moreover, while there was a focus on the impacts of ChatGPT on students' academic communication abilities and high-order thinking skills, the review identified a growing recognition of digital literacy as an essential soft skill in the age of AI. The paper concludes by offering an extensive implication and pedagogical strategies, derived from the empirical studies, to guide the integration of ChatGPT in educational settings for the growth of soft skills. This study is among the first to combine bibliometric and content analyses in this research landscape.

101368 | *Analysis on the Effect of Digital Literacy, Innovative Behavior, Culture, and Interpersonal Communication on Teachers Performance at De La Salle University Dasmariñas Thru Structural Equation Modeling (SEM)*
Marlon Masangkay, Adamson University, Philippines
Lourdes Lasian, Adamson University, Philippines
Venusmar Quevedo, Adamson University, Philippines

Assessing a teacher's performance may involve examining how much they have achieved the necessary competencies. Professional competence, personality competence, pedagogical competence, and social competence comprise the four competencies a teacher should have. Teacher performance has an important role in improving the quality of education through their knowledge and efforts. Teachers' performance is affected by numerous variables. This study aims to analyze the effect of digital literacy, innovative behavior, culture, and interpersonal communication on teachers' performance at De La Salle University Dasmariñas. The statistical survey methodology was employed in this study to substantiate its findings. This study was conducted at De La Salle University-Dasmariñas (DLSU-D) in Cavite, for the undergraduate college teachers only. The university comprises of almost 534 undergraduate college teachers from nine departments, 248 participated in the study. The study used the Partial Least Squares - Structural Equation Model (PLS-SEM) to derive the latent variable values to analyze the effect of digital literacy, innovative behavior, culture, and interpersonal communication on teachers' performance, and to determine the relationship of these variables. Furthermore, to construct a structural model to help management to improve teachers' performance. The study introduced nine hypotheses which has generated several significant discoveries. These findings are consistent with prior research, demonstrating beneficial impact of digital literacy and innovative behavior to teachers' performance. Based on the results, digital literacy, innovative behavior, interpersonal communication, and teachers' performance have a positive relationship with each other.

101404 | *Uneven Technology Landscapes: Digital Divide Effects on PISA Achievement, 2000-2018*
Joseph Lavallee, Ming Chuan University, Taiwan
Pin-Ju Chen, Ming Chuan University, Taiwan
Bruno Di Giusto, Ming Chuan University, Taiwan

Understanding technology-education relationships becomes crucial as education systems approach the generative AI revolution. This study examines technology's relationship with student achievement using PISA reading, math and science scores from 2000-2018 (excluding 2022 to avoid COVID-19 distortions) across multiple countries. We test two digital divide levels: Level 1 (access to computers, smartphones and the internet) and Level 2 (skills/usage patterns). Hypothesis 1 examines whether "connected homes" (computer+internet) enhanced learning, while Hypotheses 2-3 explore smartphone effects across and within countries respectively. We estimate country fixed-effects panel models with year dummies and precision weights to isolate technology's impact from stable country characteristics. For H1, we analyze the pre-smartphone era (2000-2012) with year controls to capture global trends in connected home benefits. For H2, we test whether smartphone effects differ between high and low-income countries using GNI per capita and interaction terms. For H3, we examine smartphone vulnerability across ESCS quartiles (PISA's measure of socioeconomic status) within countries, testing whether SES moderates technology's impact. Three findings emerge. First, we find no clear evidence that connected homes boosted achievement—suggesting Level 1 access alone does not drive performance. Second, smartphone access shows strongly negative associations in high-income countries, particularly for science (-204 points, $p<0.01$) and mathematics (-143 points, $p<0.1$), suggesting greater vulnerability in these countries. Third, within countries, both the lowest (Q1) and upper-middle (Q3) ESCS quartiles show stronger negative associations than highest-quartile (Q4) peers in mathematics (-14.7 points each), indicating Level 2 digital divide effects where affluent students better protect themselves against digital distractions.

ACE2025 Pre-Recorded Virtual Presentations

Education & Difference: Gifted Education, Special Education, Learning Difficulties & Disability

96904 | *Shifting Exclusion to Inclusion: Introducing a Reflective Framework to Support Student Teacher's Understanding of Inclusion*
Haley Brock, Manukau Institue of Technology, New Zealand

This presentation introduces a reflective framework intentionally developed to support initial teacher education (ITE) students in recognising exclusion within early childhood education (ECE) contexts in Aotearoa. It is grounded in the view that an authentic understanding of inclusion must first begin with bringing exclusionary practices to our consciousness (Ballard, 2013). The framework invites students to reflect on moments of exclusion observed within their ECE environment. The tool combines Likert-scale and open-ended prompts designed to guide critical reflection. Students are encouraged to consider how exclusion impacts the child, revisit their thoughts in the moment, and how these experiences continue to shape their practice. Developed with an awareness of the diverse worldviews held by student teachers in Aotearoa New Zealand, the framework honours individual perspectives, creating space for identity-informed responses. This presentation outlines the theoretical basis for the framework, its design process, and how it was introduced within an ITE programme. Early patterns of engagement will be briefly discussed, not as outcomes, but as indicators of how the tool may encourage deeper, ongoing reflection. This presentation invites dialogue around the role of structured reflection on exclusion and how this could positively impact on student's developing understanding of inclusion.

97234 | *The Current Status and Challenges of Resource Room in Taiwan's Higher Education*
Fu-An Shieh, National Chengchi University, Taiwan
Ya-Ru Hsu, National Chengchi University, Taiwan
Yong-Qin Hu, National Chengchi University, Taiwan
Xing-Zi Yu, National Chengchi University, Taiwan

This study examines the current practices and challenges of resource classrooms in Taiwan's higher education by interviewing seven special education and counseling professionals from three institutions. From frontline perspectives, it explores the service content, institutional difficulties, and directions for future development. Using a qualitative approach, the study adopts Braun and Clarke's (2006) thematic analysis, supported by NVivo software for data coding and categorization. Thematic analysis identified seven key themes: (1) staffing and administrative overload; (2) diverse and highly individualized student needs; (3) uneven cross-departmental collaboration; (4) tensions in parental involvement; (5) emotional exhaustion and high turnover risk among frontline staff; (6) misalignment between special admissions and service capacity; and (7) the need for integrated and flexible support systems. This study revealed significant differences among the three institutions. One key difference was related to student' use of their special education status. In low-prestigious institutions, students were more likely to use their disability status to request academic leniency or special treatment. In contrast, students from high prestigious institutions were generally more able to benefit from the available support services to enhance their academic learning. These findings align with existing literature, highlighting the ongoing gap between policy design and practical operation. Based on these insights, the study recommends increasing personnel, enhancing interdepartmental coordination, clarifying family-school roles, and establishing stronger transition and emotional support systems.This research contributes to improving sustainable and effective special education services in higher education.

101086 | *Challenges Faced by Professionals in Delivering Precise Identification for Elementary Students with Specific Learning Disabilities: A Mixed Method Research*
Hana Omar, United Arab Emirates University, United Arab Emirates

This study investigates the challenges professionals encounter in identifying Specific Learning Disabilities (SLD) within the educational context of the United Arab Emirates (UAE) using a convergent mixed-methods design. The qualitative phase involved semi-structured interviews with six professionals (e.g., teachers, special educators, and psychologists), analyzed through thematic analysis. The quantitative phase examined survey data from 96 randomly sampled professionals across UAE schools, applying descriptive statistics to explore trends and associations. Findings revealed several interrelated challenges to accurate SLD identification, including time constraints, fairness in nomination procedures, insufficient psychological support, excessive testing demands, and the limited contextual relevance of assessment tools. Interview data highlighted delays in student nominations, protracted procedures, and inadequate psychological resources. At the same time, survey results confirmed these issues by showing associations between prolonged assessments and time pressures, as well as between fairness, collaboration, and psychological support, and practitioner awareness. Together, the qualitative and quantitative findings converge to demonstrate that systemic inefficiencies and resource limitations not only delay the identification process but also reduce opportunities for collaborative and responsive practices. By situating these issues within the UAE context, marked by rapid educational reforms and highly diverse student populations, the study contributes context-specific evidence to the international literature, which has largely focused on Western systems. The results highlight the need for streamlined assessment processes, contextually adapted tools, and stronger interdisciplinary collaboration to ensure timely and precise identification of SLDs. This integration underscores how mixed-methods research can provide a nuanced understanding of both systemic and practice-level barriers in special education.

Education, Sustainability & Society: Social Justice, Development & Political Movements

95641 | *Assessment of the Conflict and Conflict Resolution Attitude and Styles: The Case of High School Student Leaders in Angeles City*
Alma Natividad, Holy Angel University, Philippines
Arlan Dela Cruz, Holy Angel University, Philippines
Jannet Reyes, Holy Angel University, Philippines

Conflict resolution techniques used by young people are important for a number of reasons. The ability to settle conflicts with others, particularly between peers, is one of the most crucial components of a child's or young person's social skills as they grow and progress through the adolescent stage. This descriptive quantitative study assessed the conflict and conflict resolution attitudes and styles of 363 high school student leaders enrolled across nine (9) junior high schools currently enrolled in the Department of Education in Angeles City. Results showed that the respondents, who are mostly female, class officers and grade 10 students believed that there are better ways to solve problems than fighting or physical aggression; they displayed self-control and cooperation. In terms of conflict handling styles, data suggests that respondents utilized all styles, however, problem solving style is significantly preferred. These findings collectively imply that respondents are dedicated to creating a calm, encouraging atmosphere where conflicts are resolved non-violently. Recommendations for further research, to improve conflict resolution programs for young people are discussed.

97407 | *Platforming Peace: Creating Space for University Student Engagement Through Global Issues in Language Education*
John Guy Perrem, Muroran Institute of Technology, Japan

This presentation reports on a peace themed survey conducted with Japanese university students enrolled in a global issues module via English. The course integrates language learning with real-world concerns, reflecting the aims of Global Issues in Language Education (GILE). The survey explored student perspectives on both international and domestic peace, including their views on the current state of peace, their expectations for the future, and the actions they believe individuals and societies should take. While results indicate that students rarely discuss peace in daily life or educational settings, many expressed strong interest in contributing to peace through education, opportunities for expression, and meaningful connections with others. The findings suggest a disconnect between student interest and available platforms for engagement. Students appear motivated but underserved, pointing to a broader issue of structural shortcomings surrounding peace discourse in formal education. This presentation proposes the concept of platforming peace, the intentional creation of space for students to reflect on, discuss, and take action toward peace within language classrooms. Building on survey data and comparisons with national and international youth peace studies, the presentation offers concrete suggestions for designing participatory platforms for peace-related learning. These include student-led forums, integrated global issues modules, intercultural exchanges, and projects that center youth voice and perspective.

97481 | *Decolonizing Education: Rethinking Early Childhood Learning in Indigenous Spaces*
Aditi Mitra, Chinhari The Young India, India

This paper attempts to understand and rethink Early Childhood Education from the context of the life world and the worldview of rural and indigenous communities. It is an attempt to contextualise (and in the process indigenize and decolonize) the developmental and learning goals of pre-schoolers in two Open Learning Centres in two villages in Chhattisgarh in central India. Modern and urban understandings (which are also westernized understandings) of child development and child education continue to colonize the culture of existing pre-schools. This necessitated the creation of a space- Open Learning Centres called Srijan-Shala (Abode of Creativity) - where early childhood education shall be in tune with the indigenous life world and worldview. There is a stress in Srijan-Shalas on points of dialogue and possible commonality between the apparently 'traditional' and the purportedly 'modern'. This paper is a rigorous documentation of an attempt at building such a space and our journey through the painstaking process of training teachers in the ethos of a democratic classroom (where learning, playing and questioning are co-constitutive), creating indigenized decolonized curriculum and lessons, and birthing pedagogic practices and innovations that are caring. Women of the same village - who have received education and are the founders of Chinhari - teach in their respective Srinjan-Shalas, sharing their know-how of their own environment, cultural practices and traditions in a form of caring collective. The paper critically reflects on the birth and the sustainability of the idea of decolonized early childhood education in rural and indigenous contexts and communities.

97795 | *Normalizing Queerness Through Inclusive Pedagogy in Selected University in Manila: Teachers' Challenges*
Jennifer Mauntol, Centro Escolar University, Philippines
Naressia Ballena, Centro Escolar University, Philippines
Ruth Santos, Centro Escolar University, Philippines
Leilani Santos, Centro Escolar University, Philippines
Julius De Leon, Centro Escolar University, Philippines

This study investigated the inclusive pedagogical practices of faculty members at a selected university in Manila and the challenges they face in teaching queer students. Using a convergent mixed-methods design, the research combined quantitative data from a validated survey tool and qualitative insights from narrative interviews with 15 faculty members. Participants were selected through total enumeration (quantitative) and purposive-convenience sampling (qualitative). Quantitative analysis revealed moderate to high implementation of inclusive practices across the learning environment, curriculum and instruction, and professional development. The respondents are mostly female, mid- to late-career educators from diverse disciplines. Many are new to the university but have prior teaching experience elsewhere. Qualitative findings identified six primary challenges: addressing gender identity, cultural adjustment, managing classroom reactions, navigating dress codes, behavioral differences, and promoting fairness without overemphasizing identity. Despite limited institutional support, faculty displayed strong commitment through adaptive, reflective practices. Grounded in Critical Pedagogy and Queer Theory, the findings show that teachers resist normative assumptions and power structures, fostering affirming, equitable classrooms. However, the lack of structural support—such as inclusive signage, gender-neutral facilities, and visible policy frameworks—limits sustained inclusivity. The study highlights the need for professional development that equips educators with practical skills, emotional intelligence, and cultural competence. It proposes a Microcredential Seminar Program to address these needs. Implications are drawn for teachers, parents, administrators, policymakers, advocacy groups, and professional development providers, emphasizing the importance of systemic, collaborative efforts to advance LGBTQIA++ inclusivity in education.

98428 | *A Qualitative Study of Barriers to Participation and Persistence in STEM Fields Among Marginalised Rural School Girl Students in India*
Nidhi Bansal, Malaviya National Institute of Technology Jaipur, India

The underrepresentation of females in science, technology, engineering and mathematics (STEM) is a persistent phenomenon across the global society. This disparity is even more evident among female students from rural and marginalised communities. Several UN sustainable development goals (SDGs) such as SDG 4.3, 4.4, 4.5, 5.1, 5.5, 5.b, 8.5, 8.6, 9.5, 9.b, 10.2 and 10.3 underscore the imperative of achieving gender parity in STEM domains. It is critical to understand that even after several governmental and institutional interventions, the presence of females in STEM higher education and careers remains low. This qualitative study aimed to understand perceived socio-cultural, economic and institutional barriers that hinder gender parity in STEM higher education in India. The study focused on female students enrolled in the Vigyan Jyoti scheme in post-secondary education in Jawahar Navodaya Vidyalayas (JNVs) in India. In-depth interviews were conducted to capture the lived experiences employing a gender-sensitive perspective. Furthermore, STEM teachers, parents and administrators were interviewed, providing triangulated perspectives on barriers faced by rural school girls in terms of participation and persistence in STEM fields. Findings uncover the patterns of entrenched gender stereotypes, apart from a lack of awareness and career guidance, and financial constraints, which significantly affect the STEM trajectories for rural girl students. The study offers recommendations to develop strategies and identify focus areas to foster gender parity in STEM fields. The findings inform practitioners, STEM teachers, researchers and policy makers on possible solutions to promote equitable participation and sustained engagement of rural girls in STEM domains.

98434 | *Mapping the Sustainable Development Goals in AI-Assisted Senior High School Workbooks: A Content Analysis from the Philippines*
Flordeliza Cuerda, Cebu Institute of Technology Philippines
Winston Ramirez, Cebu Institute of Technology, Philippines
Cheryl Oro, Cebu Institute of Technology, Philippines

This study examines the integration of the Sustainable Development Goals (SDGs) in AI-assisted senior high school workbooks developed by teachers at the Cebu Institute of Technology - University (CIT-U), Philippines. Through qualitative content analysis of 321 learning exercises, the research identifies patterns, gaps, and opportunities in SDG representation, with a focus on the role of artificial intelligence (AI) in shaping sustainability-related content. Key findings reveal that SDG 4 (Quality Education) dominates the workbooks (35.83%), followed by SDG 3 (Good Health and Well-being) (15.89%), while critical goals such as SDG 1 (No Poverty), SDG 13 (Climate Action), and SDG 14 (Life Below Water) are severely underrepresented (<2%). AI-assisted content demonstrates strengths in generating interdisciplinary scenarios but lacks depth in localizing themes and addressing environmental and socioeconomic challenges. The study recommends strategic rebalancing of SDG coverage, leveraging AI for contextualized and action-oriented activities, and enhancing teacher training for cross-curricular SDG integration. These insights contribute to the broader discourse on technology-enhanced Education for Sustainable Development (ESD), offering practical pathways to align workbook design with global sustainability agendas in the Philippine educational context.

101509 | *Intercultural Communication for Sustainable Futures: Civic Engagement in Higher Education*
M. Dolores Ramirez-Verdugo, Madrid Autonomous University, Spain

Higher education institutions are increasingly called to respond to global challenges such as climate change, inequality, and social fragmentation. The 2030 Agenda for Sustainable Development highlights the urgency of embedding sustainability into curricula, yet achieving this goal requires more than disciplinary knowledge: it demands pedagogies that foster civic responsibility, intercultural competence, and communicative agency. This paper presents a transdisciplinary initiative developed within the European Civic University Alliance (CIVIS). First implemented in Madrid and later expanded to Stockholm and Athens, the program explored inclusive and sustainable cities through challenge-based learning. By foregrounding language, culture, and civic participation, the initiative provided students with opportunities to engage in collaborative projects of real-world relevance, emphasizing dialogue and intercultural exchange as central to sustainability learning. Qualitative findings indicate that students developed a greater awareness of sustainability issues, enhanced their intercultural and communicative skills, and strengthened their capacity to collaborate toward achieving social justice. Importantly, the international dimension of the program demonstrated how transnational collaboration enriches learning, fostering solidarity across cultural and linguistic borders. The paper argues that higher education must position intercultural communication at the core of sustainability education. By integrating applied linguistics and civic engagement into transdisciplinary frameworks, universities can equip students to become critical, reflective, and responsible agents of change, capable of addressing complex global challenges in inclusive and transformative ways.

Educational Policy, Leadership, Management & Administration

97462 | *Exploring Mentoring in Higher Education Toward Faculty Retention: Basis for Mentoring Framework Development*
Romelyn Callueng, Rizal Technological University, Philippines
Nilmar Moreno, Rizal Technological University, Philippines

At the heart of every successful professional is a mentor who one way or another have accounted toward one's professional growth and development. Mentoring, like any other undertakings follows a systematic procedure. However, without proper recognition to its processes and benefits, its other many advantages remain untold. Thus, this study explores the lived experiences of faculty mentors engaged in informal mentoring within Higher Education Institutions (HEIs). Specifically, it examines how mentors interpret faculty mentoring, perceived benefits of mentoring program, the factors influencing mentor selection, key mentoring processes, and the indicators of successful mentoring that contribute to faculty retention. Using a qualitative phenomenological design, semi-structured interviews were conducted with seven faculty mentors from various HEIs. The participants included a University President, two Vice-Presidents, two Department Heads, an Academic Adviser, and a College Secretary. Transcripts were prepared for each participant, and were imported to NVivo for data organization and analysis. Findings revealed that faculty mentors viewed mentoring as strategic tool for promoting both personal and professional development of mentees. Mentoring was also perceived as a form of institutional support that equips mentees to effectively navigate their core responsibilities, while serving as a vital source of emotional encouragement that strengthens emotional commitment. The study also highlighted key mentoring processes which include, structured pairing and goal setting, regular check-ins and feedback and sustainable relationship building. Based on these findings, the study recommends HEIs to design structured mentoring programs grounded in these practices to support faculty development, enhance retention, and uphold institutional excellence.

101498 | *The Schools of the Future: What School Personnel and Architects Foresee*
Carol Cash, Virginia Tech, United States
Susan E. Johnstad, Virginia Tech, United States
Jodie L Brinkmann, Virginia Tech, United States

This purpose of the shared study was to identify what various stakeholders indicate are the school environment, instructional focus, school design features related to both instruction and safety, and key components of the school of the future. This presentation reports data from an ongoing survey of a variety of stakeholders related to school buildings; however, this presentation will focus on school principals, teachers, and architects. The survey was sent to parents, community members, school faculty and staff, school and school division leadership, architects, and school design specialists. Responses exceeded 150. This presentation is organized to share the overall perceptions of school principals, teachers, and architects, based on their survey responses. It will then include disaggregated data, allowing for a comparison of the perceptions of principals, teachers, and architects. The topics addressed in the survey include who should be involved in the school building planning process, anticipated learning experiences addressed in schools of the future, types of technology anticipated, building design features, and safety related needs. It further explores schools fifty years from now, addressing similar topics and concerns. Finally, it addresses the role of the teacher and the role of the built facility fifty years from now. Conference participants will be encouraged to share thoughts about the responses by stakeholder group and the design implications of the survey respondents based on those responses.

101587 | *Lifelong Entrepreneurship Education for Persons with Disabilities: Insights from Two Decades of Korean Research*
Youngjoon Kim, Dongguk University WISE, South Korea
Jin Hee Choi, aSSIST University, South Korea

This study presents a systematic literature review of disability entrepreneurship research in the Republic of Korea from 2002 to 2024. Using the Lifelong Entrepreneurship Education Model (LEEM) developed by the Consortium for Entrepreneurship Education, the study categorizes 34 academic and policy texts across five developmental stages: (1) pre-entrepreneurial, (2) potential entrepreneur, (3) nascent entrepreneur, (4) new business manager, and (5) established entrepreneur. Each stage reflects distinct age groups, learning objectives, and entrepreneurial competencies. The analysis reveals a notable concentration of research at the later stages, especially the "new business manager" and "established entrepreneur" levels, with limited attention to earlier stages that focus on foundational competencies such as creativity, autonomy, and leadership. This imbalance suggests that current discourse insufficiently addresses the developmental and educational needs of aspiring entrepreneurs with disabilities, particularly during formative years. This study argues for a lifespan-based, stage-sensitive approach to inclusive entrepreneurship education and ecosystem design. By shifting focus from fragmented policy frameworks to holistic, competence-driven development, researchers and policymakers can better align institutional support with the realities faced by entrepreneurs with disabilities. Practical implications are discussed for educators, ecosystem builders, and public officials seeking to foster equitable and sustainable entrepreneurship across diverse ability groups. Ultimately, this research contributes to reimagining entrepreneurship not as a singular economic event, but as an inclusive and developmental process over the life course.

Foreign Languages Education & Applied Linguistics (including ESL/TESL/TEFL)

97077 | *The Impact of an Online Asynchronous English for Academic Purpose Course on Semestral Grade Point Averages: A Longitudinal Study*
Wenjin Vikki Bo, Singapore University of Social Sciences, Singapore

With the increasing demand of English for Academic Purposes (EAP) for not only international students but also domestic students in the English-medium universities, it is essential to design the EAP provisions in a scalable way that can also offer the flexibility of learning needs during the post-COVID era. The present study examines the efficacy of an online asynchronous EAP course that is the graduating requirement for many undergraduates in a Singapore university. It aims to investigate if the completion of the course contributes to improved student performance as indicated by the Semester Grade Point Average (SGPA), and explore the implications for developing such courses in a sustainable way for higher education institutions. With the adoption of a quasi-experimental regression discontinuity design (RDD), longitudinal data was collected across four years. The institutional data was used to compare the academic performance of students who completed the EAP course to those who were exempted from the course based on a predetermined English proficiency cutoff score. Results showed that students who completed the online asynchronous EAP course consistently outperformed their academic predictions over time. The structured and self-paced EAP learning course was found to have the potential benefits to students' EAP development in a more scalable and flexible way, which is increasingly critical in the post-COVID age. It challenges the traditional assumption that the face-to-face EAP training is better and advocates the enhancement of asynchronous EAP provisions in the English-medium universities across different educational contexts.

97130 | *Developing Effective Prompts for ChatGPT: A Preliminary Study Toward Its Use as a Writing Assessment Tool*
Kayo Tsuji, Osaka Metropolitan University, Japan

Given the growing challenges in providing individualized writing instruction, this study explores the potential of large language models—specifically ChatGPT—as autonomous tools for formative assessment in English writing education. The research investigates how ChatGPT can generate pedagogically valuable feedback on learner-produced opinion-based essays, focusing on the role of prompt design in eliciting meaningful evaluations. Drawing on prior research, a prototype prompt was developed to guide the model's assessment process. A qualitative analysis of the feedback generated by ChatGPT revealed initial limitations, prompting a cycle of iterative prompt refinement aimed at enhancing the clarity, specificity, and educational relevance of the output. The final version of the prompt was then employed to generate both evaluative scores and qualitative comments on learner essays. These outputs were analyzed by two experts in English language education, who found a high degree of alignment between the scores assigned by ChatGPT and those of human raters. Moreover, the qualitative feedback offered by the model was found to parallel the kind typically provided by experienced educators, particularly in areas such as organization, argumentation, and language use. These findings indicate that, when guided by well-crafted prompts, ChatGPT is capable of producing valid and instructionally supportive feedback. The study underscores the potential of integrating large language models into language education as scalable tools for promoting autonomous writing development, particularly in contexts where individualized teacher feedback is limited. Further research is recommended to explore broader applications and long-term impacts on learner outcomes.

97336 | *The Level of and Relationship Between Academic Well-being, Academic Incompetence and Imposter Syndrome: A Study on Associate Degree EFL Learners*
Seray Tanyer, Trakya University, Turkey

Academic well-being, academic inadequacy, and impostor syndrome are dimensions of educational psychology that examine learners' academic experiences and processes. In the context of learning English as a Foreign Language (EFL), linguistic difficulties, cultural adaptation processes, and performance-oriented expectations further strengthen the possible negative impact of these dimensions. Therefore, an in-depth understanding of academic and psychological processes for EFL learners is critically important while developing strategies to cope with language- and culture-based pressures. This study examines levels of academic well-being, academic inadequacy, and impostor syndrome and the relationships between them for 92 associate degree EFL learners studying at a vocational school of a Turkish state university. In the study, a quantitative survey method was applied using the "Academic Well-being, Inadequacy, and Impostor Syndrome Scale". Results indicate that participants have a positive academic well-being in general. But, quite a few doubts about self-confidence and individual capability are observed, as well. For the academic inadequacy dimension, high stress and anger towards oneself signify significant psychological and emotional challenges that learners experience. Also, some participants attribute their success to external factors and refer to symptoms of imposter syndrome. These findings emphasize the importance of resilience training, structured feedback processes, and culturally sensitive approaches to language education.

101245 | *Improving Class Management and Collaborative Learning: Google Workspace as a Pedagogical Platform in Language Classrooms*
Lanasari Tan, Ming Chuan University, Taiwan

Teachers have used diverse platforms in language teaching classrooms along with the growth of technology. Each platform delivers distinctive pedagogical affordances, assisting instructional processes while enhancing curricular efficiency and accessibility. In this study, the researcher utilized Google Workspace as a teaching platform in the language classroom to facilitate the teaching process, encompassing lectures, class notes, interaction, learning collaboration, learning resource sharing, in-class exercises, assessments, class management, and surveys or data collection. This study employed an action research, leaning on the researcher's classroom observations, field notes, and student interviews as key data sources. Results indicate that every student already has a Google account and regularly uses it, which made it easier to adopt Google Workspace during class. Moreover, Google Workspace is moderately easy to use, even for those with limited technical skills. Google Workspace can also be used simultaneously in physical classrooms and online, providing convenience for both in-class and online students. Furthermore, all data is stored in Google Drive, allowing students to review material at any time. Moreover, Google Meet improves interaction between the teacher and students, as well as among students themselves, while Google Docs and Google Spreadsheets enable collaborative learning among students.

101246 | *A Longitudinal Study of University EFL Students' Self-confidence in Speaking English with PBL and AI-assisted Learning Approaches*
Shu-ling Chen, National Sun Yat-sen University, Taiwan

Self-confidence is a key affective factor that shapes learners' willingness to communicate. However, research on the integration of AI technology in affective domains of foreign language learning remains limited. This study investigates EFL university students' self-confidence in speaking English with AI-assisted learning and explores the potential of integrating role-play project-based with AI-assisted learning (PBaiL) in classroom instruction. A longitudinal 2x3 mixed-methods design was employed to examine the participants' (N = 55) self-confidence in English speaking performance (SCESP) and to elicit their perceptions of AI tools as linguistic support in building SCESP. The participants at the A2 level of CEFR were assigned to two groups: PBaiL (n = 28) and formal instruction (n = 27). Quantitative data were collected at 3 timepoints over an academic year. The PBaiL group's learning, motivation, and performance were additionally assessed at the end of the year. Qualitative data were collected at 2 timepoints: through face-to-face interviews at the end of the first semester and via Google Forms at the end of both semesters. Results indicated a significant increase in their self-perceived SCESP for both groups. The PBaiL showed positive outcomes in learning, motivation, and performance; however, their SCESP growth did not significantly exceed that of the formal instruction group. Participants perceived AI tools as effective in helping them manage uncertainty in English language expression, leading to reduced language anxiety and enhanced self-confidence. While ethical challenges remain, these findings suggest that integrating AI technology has the potential to support the affective dimension of English language learning.

Higher Education

93755 | *The Effect of Perceived Family Environment Functioning, Previous Social Experiences, and Values on Social Competence of College Students*
Fu lijia, University of Srinakharinwirot, Thailand
Sittipong Wattananonsakul, Srinakharinwirot University, Thailand
Chanya Leesattrupai, Srinakharinwirot University, Thailand

This study aims to explore the influence mechanisms of family environment, social experience, and values on the social competence of college students. The research sample consists of students currently enrolled at Guizhou Industrial Vocational and Technical College. A total of 330 questionnaires were distributed, yielding 310 valid responses. Data were collected through questionnaires, with the independent variables being family environment, social experience, and values, and the dependent variable being social competence. Multiple regression analysis was employed, and results indicated that all independent variables significantly correlate with and predict social competence. Specifically, elements within the family environment—such as parent-child relationships and overall family atmosphere—along with facets of social experience—including participation in social practices and club activities—and aspects of values—such as interpersonal interaction concepts and cooperative awareness—were found to positively contribute to enhancing social competence.

93756 | *The Influence of Family Atmosphere, Learning Values, and Self-expectations on Chinese Language Learning Motivation Among Late Adolescents*
Haolin Yang, Srinakharinwirot University, Thailand
Sittipong Wattananonsakul, Srinakharinwirot University, Thailand

This study examines the impact of family atmosphere, learning value, and self-expectation on late adolescents' motivation to learn Chinese. Data were collected via questionnaires from 330 students aged 18 and above at Guizhou Vocational and Technical College. Multiple regression analysis was employed to determine the effects of the independent variables on language learning motivation. The findings were consistent with expectancy-value theory, revealing that students with higher learning value and stronger self-expectation exhibited significantly greater motivation to study Chinese, which in turn was associated with improved academic performance. Moreover, family atmosphere indirectly influenced motivation by positively affecting both learning value and self-expectation. These results highlight the significant roles that family atmosphere, learning value, and self-expectation play in motivating students to learn Chinese, providing valuable insights for educators and filling an important gap in existing research.

95229 | *Towards a Successful Postgraduate Life and Beyond: The Construction of a Postgraduate Transition Module*
Yingchun Li, Xi'an Jiaotong Liverpool University, China

This presentation is to demonstrate the design and the implementation of a postgraduate transition module that is aimed at facilitating postgraduates' transition process from their high school studies into their postgraduate studies in a Sino-British joint university in China. More than that, the module is also aimed at fostering postgraduates' transferrable lifelong, lifewide, and lifedeep learning skills and employability attributes, so that postgraduates will be empowered with knowledge and skills that make possible their career readiness, career adaptability and career resilience. Previously, the importance of facilitating postgraduates' transition process has been largely underestimated. In the worst scenario, difficulties in postgraduates' transition might result in their withdrawal from academic institutions, on top of the emotional stress and frustrations that occurred. This, will in turn lead to negative impact on their academic institutions. Although the causes behind the scene might be complicated and multifold, one of the most important causes might be an insufficiency in the support provided for postgraduates' transition. In response to this reality, a blended module targeted at engendering an enjoyable and productive learning experience for postgraduates' transition has been put into practice. The module is comprised of an online transition support system (TSS) with resources on logistical as well as academic information, and onsite activities with postgraduates being the designers of their personalized learning trajectory. It is hoped that this presentation will be of referential value for educators who are interested in research areas including learning technologies, postgraduate transition, and employability.

95478 | *Examining Motivation-related Variables Before and During the COVID-19 Pandemic in the Japanese Context*
Rieko Nishida, The University of Osaka, Japan

The present study aims to shed light on how the motivation of students who experienced education during COVID-19 differs from that of students before the pandemic. The study also examined how attitudes toward online learning are intercorrelated with motivation-related variables. To understand how students' motivation, international posture, and perceived communication competence changed over time from before to during the COVID-19 pandemic, data were collected using a repeated cross-sectional survey. Two cohorts of university students, one from before and one from during the COVID-19 pandemic, participated in the present study. Participants totaled 403 in 2018, and 271 in 2021, numbering 674 students in all. The study was then to investigate what extent students' motivation-related variables changed during the COVID-19 pandemic (RQ1). In addition, the study investigated how students' motivation-related variables and attitudes toward online learning were related during the COVID-19 pandemic (RQ2). In response to RQ1, in independent t-tests, in 2021, the results showed statistical significance in intrinsic motivation in stimulation: $t = -4.373$, $df = 672$, $p = .001$, $d = -0.344$, and intended learning effort: $t = -4.102$, $df = 672$, $p = .001$, $d = -0.322$, and these factors showed higher tendencies than 2018. To response to RQ2, in the inter-correlations between attitude toward online learning and motivation-related variables, attitude toward online learning was positively correlated with effort ($r = .427$, $p < .01$) and perceived communication in reading ($r = .405$, $p < .01$). This presentation will provide a detailed analysis of the results.

95824 | *Development and Design of an Educational Escape Room in Teaching Pediatric Dentistry*
Trinette Colina, University of the East Manila, Philippines

In recent years, escape rooms have gained popularity as an engaging and effective teaching methodology in higher education, particularly in the health sciences. They provide students with opportunities to simulate real-life scenarios, enabling the application of theoretical concepts into practical contexts. This approach enhances student learning and bridges the gap between theoretical knowledge and future professional experiences. Dentistry, being a practical subject, offers an ideal platform for students to engage in equipment manipulations, solving puzzles through accurate execution. Escape games align remarkably well with dentistry. However, little of its use has been reported in the field of dentistry. The main objective is to design and create a methodology for the implementation of escape rooms as a teaching strategy to improve student learning and engagement in the undergraduate subject Pediatric Dentistry of the University of the East College of Dentistry. Specifically, the study aims to identify the demographics, skill level, and needs of the students; to define the learning outcomes, group size, and playtime length of the escape room; to illustrate the theme, setting, narratives, and environment; to create the puzzles, game assets, hint and scoring system, and game rules; to construct a structured, facilitated debriefing for the students; to develop a prototype and playtest the escape room; and to formulate an assessment tool for student feedback. Three faculty members agreed to join the pilot study. A debriefing was facilitated, and a survey questionnaire was completed to probe into their experience.

96307 | *The Potential of Sketchfab in Visualizing Technical Processes in the Educational Environment*
Liubov Khomenko, Poltava V.G. Korolenko National Pedagogical University, Ukraine
Lesia Matviienko, Poltava State Agrarian University, Ukraine
Serhii Kashuba, Poltava V.G. Korolenko National Pedagogical University, Ukraine

This study investigates the educational potential of Sketchfab as a digital tool for visualizing technical processes, with a particular emphasis on its application in STEM and technology education. Situated within the broader framework of the digital transformation of education, the research highlights the pedagogical affordances of 3D modeling and visualization technologies in enhancing students' cognitive engagement, spatial reasoning, and conceptual understanding of complex technical phenomena. Adopting a mixed-methods research design, the study integrates quantitative data—such as platform usage statistics and engagement metrics—with qualitative insights obtained through interviews and surveys conducted with both educators and learners. Key variables analyzed include user demographics, frequency and purpose of use, and perceived impact on learning outcomes, student motivation, and knowledge retention. Findings indicate a substantial increase in Sketchfab adoption during the 2023–2024 academic year, marked by a 40% growth in teacher usage and a 37.5% rise in student engagement. The platform is widely employed for visualizing 3D models, supporting project-based learning, and enriching virtual laboratory experiences. Notably, 85% of surveyed students reported improved comprehension of complex content, while 90% acknowledged enhanced spatial thinking abilities. The study concludes that Sketchfab contributes meaningfully to the development of learner-centered, interactive educational environments, aligned with constructivist and experiential learning theories. Its integration into instructional practices enhances digital pedagogy by promoting active learning, collaborative knowledge construction, and technological fluency. Future research should focus on the longitudinal impact of Sketchfab implementation and the development of evidence-based methodological recommendations for its use in diverse educational contexts.

96328 | *Accreditation, Internationalization, and World University Rankings: Basis for Quality Assurance Framework for Higher Education Institutions (HEIs) in the Philippines*
Solane Duque, Emilio Aguinaldo College, Philippines
Norita Manly, Emilio Aguinaldo College, Philippines

Accreditation, Internationalization, and World University Rankings (WUR) have increasingly shaped the higher education landscape over the last decade. Whilst these three dimensions have been previously examined in isolation, studies have suggested that there is a strong interplay among them. Applying qualitative content analysis using NVivo and QCAmap software, the study identified eight themes and 23 sub-themes related to accreditation across five international standards of the Asean University Network (AUN, ASEAN), Commission on Academic Accreditation (CAA, UAE), Oman Academic Accreditation Authority (OAAA, Oman), Quality Assurance Agency for Higher Education (QAA, Europe), and Southern Association of Colleges and Schools Commission of Colleges (SACSCOC, USA); seven ranking themes across the Times Higher Education (THE), Quacquarelli Symonds (QS), and Academic Ranking of World Universities (ARWU); and seven internationalization themes based on Transnational Higher Education (TNHE) Philippine Republic Act 11448 and common internationalization definitions. The Philippine accreditation standards revealed no connections in the sub-themes of Documentation, Performance, and Funding and Financial Support within the Accreditation themes. Similarly, in the Internationalization themes, there were no connections found in the Strategy and Communication, Facilities and Infrastructure for Internationalization, and Faculty and Staff Development for Internationalization. In the Ranking themes, there were also no connections in Faculty/Staff Quality, Global Outlook and Diversity, Student Success and Graduation, Global Influence, and Income and Investments. To address these identified gaps, the study extracted indicators from the five international standards and proposed a quality assurance framework aimed at enhancing the outcomes of Accreditation, Internationalization, and World University Rankings for Philippine HEIs.

96524 | *Transforming the Development of Practical Skills in Physiotherapy Students Through Innovative Remote Observational Learning Method*
Man Sum Annie Wu, Tung Wah College, Hong Kong
Pui Yuk Grace Szeto, Tung Wah College, Hong Kong
Wai Ming Lo, Tung Wah College, Hong Kong
Siu Ching Dorothy Cheung, Tung Wah College, Hong Kong

Classroom-based, teacher-led demonstrations are the traditional mode of practical skills education in Physiotherapy. Remote observational learning promotes personalized learning and enhances skill demonstrations. The current project aims to evaluate the effectiveness of remote observational learning in enhancing the acquisition of practical skills among physiotherapy students. Eight educational videos were created, focusing on manual skills (mobility assistance and Proprioceptive Neuromuscular Facilitation) and observational assessment skills (movement analysis). Demonstrations were provided from both first- and third-person perspectives, enhanced with visual annotations and voiceovers. Each video included a checklist to support skill demonstrations, and students accessed these videos for skills acquisition, mental rehearsal, and revision using personal screens or virtual reality headsets. Skill performance was evaluated using a standard performance criteria checklist, with a score of over 75% indicating acquisition. A 10-question survey was conducted to gather students' feedback on video quality, as well as experiences and preferences regarding remote observational learning models. One hundred and six physiotherapy students recruited from two cohorts utilized at least one video, achieving skill acquisition ranging from 90% for manual skills (n = 99) to 97% for observational skills (n = 57) with personal screens. Students using virtual headsets achieved a 91% acquisition rate (n = 44). According to the survey, all responders (n = 9) agreed that remote learning effectively facilitates skill acquisition and revision. Furthermore, both first-person and third-person perspectives (77.8% vs 77.8%) were preferred in the skill demonstration. In conclusion, remote observation from multiple perspectives facilitated the acquisition of practical skills among physiotherapy students.

96697 | *Transforming the Landscape: How Project-Based Learning Is Evolving Material Science Education*
Low Bee Lee, Singapore Polytechnic, Singapore
Gilbert Teo, Singapore Polytechnic, Singapore
Goh Zhen Ke, Singapore Polytechnic, Singapore
Joe Ong, Singapore Polytechnic, Singapore
Ng Su Xiu, Singapore Polytechnic, Singapore
Ng Ting Ting, Singapore Polytechnic, Singapore

Integration of industry-linked initiatives with project-based learning (PBL) in material science education promises to transform the way students become engaged and attained mastery of the academic contents. The involvement of industry partners, an element of this educational model, is crucial for simulating the professional scenarios in addressing real-world challenges. Students acquire invaluable insights and experiences that help bridge the gap between academia and industry. Mentorships rendered by the industry experts not only provide different perspectives that are aligned with current industry standards, but also ensure projects are theoretically sound and practically relevant. In the process, students are equipped with the essential skills to meet the demands of the material science industry for a seamless career transition. Our research highlights the benefits of PBL in facilitating the learning process and outcomes. PBL fosters a shift towards formative, skills-based assessment methods with an emphasis to promote continuous feedback and personal growth throughout the project delivery. This hands-on approach supports students' development to become life-long learners who possess higher-order cognition and 21st-century skills, including critical thinking, creativity, problem-solving, teamwork and communication. A study, involving five different projects in small groups of four, demonstrates improvements in cognitive and psychomotor abilities while the affective domain remains stable. Through PBL, students gain a profound understanding of material science principles and extend their technical skillsets. The study aims to uncover optimal strategies and best practices to develop dynamic learners with enhanced intellectual engagement, as well as promote inclusive, collaborative, and progressive educational practices that reflect industry standards.

97429 | *Physical Education Students' Expectations on the Promotion of Professional Sportsmanship in Regional Higher Education Institutions: A Case Study of Guangxi*
Liaohua Wei, Guangxi Minzu University, Thailand
Metee Pigultong, Rajamangala University of Technology Thanyaburi, Thailand

In the context of the rapid advancement of physical education in China, higher education institutions are placing more emphasis on the development of professional sportsmanship, which includes both physical and mental well-being and promotes fundamental values such as collaboration, fair competition, and persistence. Guangxi Minzu University, being a regional university, has difficulties in fostering professional sportsmanship due to constrained resources. This study investigates (1) the level and dimensions of PE students' expectations regarding sportsmanship promotion, and (2) the personal, institutional and socio-cultural factors that shape these expectations. A convergent mixed-methods design was employed. From an accessible population of 20,000 undergraduates enrolled in compulsory or elective PE courses at Guangxi Minzu University, a purposive sample of 392 students (stratified by gender, grade and sport specialism) completed a validated 5-point Likert questionnaire ($\alpha = .85$). Twenty additional students participated in semi-structured interviews to contextualise the quantitative findings. Descriptive statistics ($M \pm SD$), multiple regression and thematic content analysis were used for data triangulation. The findings of the study reveal that students have multifaceted expectations regarding the enhancement of professional sportsmanship, which are influenced by various factors such as personal background, educational experiences, and the social environment. The study also identifies the current state of sportsmanship cultivation at Guangxi Minzu University and provides insights into the strategies and initiatives that can be implemented to improve the promotion of professional sportsmanship among students.

98492 | *Boundaries in Digital Interactions in Higher Education: A Comparative Analysis*
Symeon Mandrinos, Swinburne University of Technology, Malaysia
Constance Liew Sat Lin, University Malaysia Sabah, Malaysia

This study explores the boundaries that shape the usefulness of digital interactions in higher education. Utilising fuzzy set qualitative comparative analysis (fsQCA), we hypothesise how the conditions of technology dependence, self-regulated autonomy, and restrictions explain the usefulness of digital (blended and online) interactions. Our findings reveal that autonomy contributes to a space bubble where the concept of boundary – particularly represented by the clopen state – works together to explain usefulness. The relationship between autonomy and usefulness posits that when autonomy is increased under complexity, the clopen state (boundary) regarding usefulness is a fuzzy but necessary condition to the outcome. Contrary to prior findings that label technology dependence, self-regulated autonomy, and restrictions as counterproductive, our study acknowledges that boundaries do not diminish usefulness; instead, they can enhance digital interactions when these conditions are necessary. We identify critical gaps regarding the interplay of these conditions and advocate for larger, more diverse studies to further elucidate the complexities surrounding technology dependence, self-regulated autonomy, and restrictions.

101265 | *Meeting Basic Psychological Needs Through Online Technologies in a Doctoral Degree Program*
Loren Naffziger, Grand Canyon University, United States
Terence Branch, Walden University, United States

Despite the shifting of colleges and universities to online doctoral programs, the graduation success rate remains low. Motivation is closely linked to student achievement in online learning. The purpose of this qualitative study was to explore doctoral students' perspectives on how educational technology supported their motivation to earn a doctorate. Deci and Ryan's self-determination theory provides the theoretical framework for this study. The research questions focused on the experiences of the participants related to how online technology supported their psychological needs of autonomy, competence, and relatedness. The data collection was completed through semistructured interviews with 12 participants who earned doctorates in an online educational program. The Braun and Clarke thematic analysis process was used to find the seven themes: (a) instructors incorporated online technology to support learning, (b) use of online technology supported student's autonomy, (c) use of online technology hindered students' expertise, (d) completing a doctorate online is difficult and time consuming, (e) use of online technology supported students' expertise, (f) use of online technology promoted social integration, and (g) online technology usage could not replace face-to-face interactions. Findings from this study may help higher education stakeholders improve the motivation of online doctoral students by addressing the learners' basic psychological needs. Motivating students to complete their programs can increase graduation rates, advancement for students in their careers, and create positive social change by helping learners become more knowledgeable and successful.

Interdisciplinary, Multidisciplinary & Transdisciplinary Education

96483 | *Scientific Modelling: A Transdisciplinary Approach from Kindergarten to High School – an Illustration with the Solar System*
Emmanuel Rollinde, CY Cergy Paris University, France

This presentation explores how scientific modelling can serve as a transdisciplinary framework for fostering scientific inquiry and critical thinking across all school levels, from early childhood to late adolescence. We first describe how historical advances in the understanding of our Solar system may be described through modelling activiies. We then analyze two classroom case studies: one conducted in kindergarten and another in a high school physics class. Both are structured around the dynamic modelling cycle described by Sensevy et al. (2008), involving observation, prediction, abstraction, and model revision. This cycle is anchored in the educational traditions of Deweyan inquiry and inquiry-based science education (IBSE). In kindergarten, children explore the motion of the sun and shadows, gradually constructing elementary models through embodied experience, drawing, and collective dialogue. In high school, students use a large-scale physical model—the "human orrery"—to investigate Kepler's laws, engage with geometric reasoning, and confront empirical data. These sequences demonstrate that scientific modelling is not only a disciplinary tool but also a powerful pedagogical bridge between language, mathematics, and physical experience. Modelling encourages learners to engage with complexity, navigate uncertainty, and build shared understanding—competencies at the heart of global citizenship and education for peace. It promotes a dialogical culture of science learning, where knowledge emerges through cooperative reasoning, not authoritative transmission. By linking scientific reasoning with students' embodied, linguistic, and cognitive development, this approach proposes a genuinely transdisciplinary educational practice. It fosters intellectual curiosity, epistemic humility, and mutual respect—key dispositions for living together in a diverse and interconnected world.

96927 | *A Study on the Learning Effectiveness of a Gather Town-Based Contextual Puzzle Game Incorporating Scaffolding Theory on Junior High School*
Chen Kai Hung, National Taiwan University of Science and Technology, Taiwan
Joni Tzuchen Tang, National Taiwan University of Science and Technology, Taiwan

This study aims to develop a contextual digital puzzle game based on Gather Town to enhance junior high school students' understanding of marine education, sustainable development, and localization through technology-enhanced learning. The game aligns with SDG 14 (Life Below Water) and addresses four major marine pollution issues: plastic waste, heavy metal contamination, deep-sea mining, and ocean noise. It also incorporates local topics such as the Yehliu Geopark and the restoration of oval squid, promoting interdisciplinary learning and cultural identity. The study further explores the impact of scaffolding strategies on students' learning outcomes, focusing on three aspects: flow experience, technology acceptance, and learning effectiveness. A pre-test and post-test design was adopted to evaluate students' knowledge acquisition and attitude shifts toward marine sustainability and local environmental issues. Participants included 93 seventh-grade students, divided into an experimental group (with scaffolding) and a control group (without scaffolding). Findings indicate that the Gather Town-based contextual puzzle game significantly improved students' understanding of marine and local issues, and enhanced their flow experience and technology acceptance. Although both individual and collaborative learning groups showed significant gains across all variables, there were no notable differences between the two groups. Overall, the results demonstrate the educational potential of combining digital games with scaffolding theory for promoting sustainable and localized education. The study offers practical insights for future instructional design and the integration of game-based learning into issue-oriented curricula.

97855 | *Reclaiming the Human in Technical Education: Embedding Rhetorical and Analytical Skills in STEM Curricula*
Janice Henderson, University of Doha for Science and Technology, Qatar
Sweta Bharadwaj, University of Doha for Science and Technology, Qatar
Tiffany Cone, University of Doha for Science and Technology, Qatar

As artificial intelligence reshapes technical industries, the role of human intelligence in education demands renewed attention. In many STEM-focused universities, general education is often treated as secondary. Yet the competencies fostered through the humanities — analytical reading, ethical reasoning, argument construction, and communication — remain essential for developing adaptable, future-ready graduates. This presentation shares early findings from a faculty-led study at an applied university aimed at identifying core humanistic soft skills that can be embedded into general education courses in mathematics and science. The central question guiding the project is: How can rhetorical and analytical skills be meaningfully integrated into technical curricula to enhance both academic and professional development? Drawing on faculty interviews, curriculum reviews, and research on the future of work, the study reveals gaps in students' reasoning, synthesis, and audience awareness. It also highlights faculty openness to a shared curricular structure that nurtures critical thinking and ethical engagement alongside technical training. Although still in the initial stages and limited by sample size and institutional context, the project proposes a flexible framework for interdisciplinary teaching. The goal is to support not only technical proficiency but also the cognitive and civic capacities needed to navigate complexity, communicate insight, and lead responsibly. This paper contributes to ongoing discussions on the balance between technology and humanity in education, aligning with themes of global citizenship, job readiness, leadership, and the ethical role of higher education in an AI-driven world.

International Education

96908 | *Is Scholarship the Real Key to Taiwan-Japan Student Mobility? A Literature Review*
Hoang-Nam Tran, Tokushima University, Japan
Wen-Chi Hsu, National Pingtung University of Science and Technology, Taiwan

International student mobility between Taiwan and Japan has garnered increasing attention, driven by shared cultural ties and regional integration efforts. Scholarships are often cited as critical incentives for student exchanges, yet the true influence of financial aid on mobility patterns remains underexplored. This literature review examines whether scholarships are the decisive factor in facilitating student mobility between Taiwan and Japan, or if other structural and policy factors play equally significant roles. A review of academic articles, government reports, and institutional publications from the past two decades was conducted. The analysis focused on scholarship programs, mobility trends, policy frameworks, and identified challenges influencing inbound and outbound flows. Findings reveal that while scholarships such as MEXT and Taiwan Scholarship positively impact enrollment numbers, their effect is mediated by factors including language proficiency barriers, cultural integration challenges, limited credit recognition, and inadequate bilateral agreements. Especially, Japanese student mobility to Taiwan remains low despite scholarship availability, underscoring non-financial barriers. This review challenges the conventional emphasis on financial incentives alone and calls for strategies that enhance mobility quality and equity.

96930 | *In an Educational Kaleidoscope World: Philippine Curricula, Its Problems, and a Proposed Evaluation Framework*
Gene Khyle Francis Galvez, Mapua University, Philippines

Developing a curriculum for a culturally and linguistically diverse nation such as the Philippine archipelago has proven to be difficult. Over the years, many have criticized the curriculum for being over-congested and irrelevant to the issues and demands of the present world. This is compounded by a lack of basic literacy as well as twenty-first century skills amongst basic education learners. Various reforms have been initiated in order to develop the foundational skills among learners. However, the K-12 curriculum was proven to be inefficient for many Filipinos who favored the shorter K-10 curriculum. Many even deem that the curriculum has failed to prepare students for either work or higher education, both of which were the promises of the new curriculum. In the first place, what should have been the goals for a basic education curriculum? This question was front and center as the new curriculum was crafted early this year. This curriculum aimed at focusing on foundational skills and decongestion- and yet these solutions have already been proposed in the past curriculum. Given various solutions to solve the educational crisis, this presentation aims to articulate the problems in the previous curricula and demonstrate their implications in a global context.

Language Development & Literacy

98542 | *Empowering Literacy: Pre-service Teachers as Reading Buddies for Young Learners*
Winston Ramirez, Cebu Institute of Technology University, Philippines
Flordeliza Cuerda, Cebu Institute of Technology University, Philippines
Cheryl Oro, Cebu Institute of Technology University, Philippines

This qualitative study explores the perceptions and experiences of both teachers and learners participating in a Reading Buddies Program. The program pairs teachers with learners in one-on-one reading sessions designed to enhance literacy skills and foster meaningful connections. Participants were chosen purposively to participate in the qualitative aspect of this study. Coding, content and thematic analysis were utilized. Semi-structured interviews, observations, and reflective journals were used to gather data. The findings highlight the benefits of personalized attention, the role of emotional support in literacy development, and the mutual learning that occurs during the interactions. The findings showed that four essential themes were formed based on the perceptions of learners in the Reading Buddies Program and these are: increased motivation and engagement, improved confidence, sense of responsibility, and stronger social connections. Whereas, on the teachers' reflections on the program's impact on learner literacy and teaching practices the resulting themes include improved reading speed and accuracy, enhanced comprehension skills, development of reading strategies, and increased reading practice. Finally, the study revealed that the Reading Buddies Program offers a holistic approach to literacy development and highlights the value of peer-assisted learning in fostering confidence, motivation, and academic growth, making it an essential component of effective literacy instruction.

101210 | *Reversing the Portfolio Pedagogy to Facilitate Style Transition in Academic Communication – the Scaffolded and AI-excluded Reflective Practice*
Chi Shen, Hong Kong University of Science and Technology, Hong Kong

This presentation focuses on a case study of senior Math undergraduates' learning of popular science communication through scaffolded reflective practice. The case begins with the challenge of transitioning from academic writing (essays and mathematical proofs) to writing for the general public. To students of Math/Computer Science majors whose first language is not English (despite learning in an English Medium Instruction/EMI environment), transitioning between two different writing styles doubles up on their existing effort of language development, as these students need to not only acquire a style that is less practised in academia but present abstract/ advanced math ideas to audience outside of the silo of math. To enable Math students to practice the popular-science communication style, the teaching of written communication has resorted to a preset learning portfolio and scaffolded practice of written reflection. This alternative 'process writing', as evidenced in students' practices and their final products, has enabled various degrees of transition from the research-focused, impersonal and formal academic style to a more audience-centred and engagement-conscious approach to written communication. The consistent practice of written reflection also intends to mitigate unproductive use of GenAI for language learning – instead of generating the most probable content for task completion, students are encouraged to explicate the development of ideas, personal voices and choices of styles. As conclusion, this talk will discuss what constitutes critical reflection and how (possible) to assess written reflection by comparing human reflection and statistical modelling of human reflection.

Learning Experiences, Student Learning & Learner Diversity

96433 | *The Moderating Role of Affective Engagement on the Relationship Between Learning Autonomy and Cognitive Engagement*
Neal Nikko Espejo, Ateneo de Manila University, Philippines

The study explores the moderating role of affective engagement on the relationship between learning autonomy and cognitive engagement among university students. Grounded in Self-Determination Theory, the research examines how affective engagement, characterized by emotional connection and enjoyment in learning, influences the effect of learning autonomy on cognitive engagement. The sample consisted of 178 business and information management students from a university in the Philippines, selected through purposive sampling. Using validated scales for learning autonomy, affective engagement, and cognitive engagement, data was analyzed through moderation techniques and simple slope analysis. The findings reveal that while both learning autonomy and affective engagement positively predict cognitive engagement, higher levels of emotional engagement diminish the benefits of learning autonomy. Specifically, learning autonomy's impact on cognitive engagement is strongest at low and average levels of affective engagement but weakens at high levels. The results highlight the complex interplay between students' emotional and cognitive responses in learning environments. The findings suggest that while fostering both autonomy and affective engagement is beneficial, educators must strike a balance to optimize cognitive engagement. This research provides valuable insights for designing learning activities and environments that address students' emotional and intellectual needs in higher education.

97114 | *Challenges and Most Significant Achievements of Students Participating in a Community-Based Research Service-Learning Course: A Qualitative Interview Study*
Janine Bittner, Ruhr University Bochum, Germany
Janina Kempchen, Ruhr University Bochum, Germany

This qualitative interview study examines the work and output achieved in a specific teaching project that focused on the complex social issue "social inequality, poverty and housing" from student's perspective. The teaching project included elements of community-based research and service-learning, lasted two semesters and was carried out at the Ruhr University Bochum as part of the bachelor degree programme in geography. This study aims to develop an understanding of the challenges and difficulties the students faced. In addition, we were interested in finding out what the students considered to be their most significant achievement made in the project work. We conducted qualitative interviews with 13 students, out of the 15 students who participated until the end of the course. Two of the very open interview questions focused on the mentioned research objectives. After transcription and pseudo-anonymisation, the interviews were analysed using qualitative content analysis (inductive category formation method). It became apparent that the challenges were primarily in the following areas: defining the direction of research, defining the research questions, and difficulties in finding a community partner. The students considered the most significant achievements to be in the areas of acquiring a community partner, good teamwork and team building. Despite the restrictions imposed during the COVID-19 pandemic and the necessary changes to the course structure, the study's results provide important insights for course instructors who wish to adopt similar teaching approaches, highlighting the challenges faced by students and their achievements.

97196 | *Promoting Professional Identity and Cross-Cultural Understanding in Cabin Crew Education Through Instagram-Style Simulation Reports*
Wan-Ling Lo, National Taipei University of Technology, Taiwan
Ming-Hsiu Tsai, National Taipei University of Technology, Taiwan

This study employs an action research method to examine the effectiveness of Instagram-style simulation reports in enhancing learning motivation, professional identity, and cross-cultural understanding among aviation service students. Twenty-three students from a university aviation service department (including two students with special learning needs) participated in two cycles of Look-Think-Act action research, engaging in Instagram posting tasks centered on role-playing and cultural themes. Students portrayed their ideal flight attendant roles by wearing professional attire for photographs and writing accompanying captions. In the second phase, they selected specific international routes and incorporated cultural hashtags to demonstrate cross-cultural service competencies. Quantitative results revealed mean scores of 4.18, 4.27, and 4.17 for learning motivation, professional identity, and cross-cultural understanding, all exceeding the 4-point threshold. Qualitative analysis identified a three-stage professional identity development process: surface attraction, operational awareness, and value internalization. The multimodal and interactive design effectively promoted student engagement, with special needs students demonstrating strong adaptability by overcoming traditional text-based barriers through visual expression. This research suggests that the cyclical refinement process of action research may enhance teaching effectiveness, and that Instagram simulation reports could promote professional identity and cross-cultural competency development. The findings provide empirical evidence for innovative and inclusive pedagogical approaches in aviation and vocational education. Future research could expand to diverse cultural backgrounds and institutional settings, incorporating AI tools for more objective learning behavior analysis.

97255 | *Inclusion, Belonging, and Achievement: A PSSM Study of Sri Lanka's Multicultural Classrooms*
Jayamini Ratnayake, American College of Higher Education, Sri Lanka
Stephanie Perera, American College of Higher Education, Sri Lanka

Various psychological and social factors shape student learning, with a sense of belonging emerging as an influential factor in academic engagement and achievement. Sri Lanka is a multiethnic and multicultural nation, comprising major ethnic groups such as the Sinhalese, Tamils, and Muslims. Sri Lanka's diverse classroom settings pose distinct challenges and offer valuable opportunities for fostering student belonging. Using Goodenow's Psychological Sense of School Membership (PSSM) framework, this study investigates how students from diverse ethnic and linguistic backgrounds perceive their inclusion in the classroom and explores the relation between these perceptions and their academic performance. The study involved a mixed method of data collection where a combination of quantitative and qualitative data collection was employed. Questionnaires were given out to 200 students at the American College of Higher Education, (a pioneer higher educational institution in Sri Lanka) in all 03 official languages: Sinhala, Tamil and English Language. The data gathered were analyzed using both IBM SPSS Statistics 27.0.1 for quantitative data and thematic analysis for qualitative insights. To enhance the analysis of academic outcomes, student attendance records and overall GPA were utilized as objective measures of academic engagement and achievement. By analyzing student perceptions through the PSSM framework alongside objective academic metrics (GPA, attendance), this study demonstrates that inclusive educational environments directly enhance belonging and performance. The findings contribute to global discussions on educational equity, stressing the importance of multilingual instruction to strengthen teacher-student relationships, reduce dropout rates, and boost academic success in diverse societies like Sri Lanka.

97414 | *Bridging Academic Achievement and Career Readiness: The REP Scholars Experience*
Elodie Billionniere, Miami Dade College, United States
Lawrence Meyer, Jr., Miami Dade College, United States

The Rebooting through EmTech Programs (REP) initiative, funded by the National Science Foundation, supports low-income and underrepresented students in undergraduate computing fields—specifically cybersecurity, data analytics, and information systems technology. Over the past two years, REP has focused on increasing student confidence, academic performance, and career readiness. An evaluation of the program was conducted through surveys and focus groups. Findings revealed strong student engagement, high levels of mentorship satisfaction, and solid academic persistence. Many scholars reported increased confidence in their technical skills and goal-setting abilities. They also felt more capable of navigating academic and personal challenges. These gains were supported by faculty mentoring, scholarships, and access to hands-on learning and career development opportunities. However, students also faced challenges. Some reported a limited sense of belonging on campus. Others struggled with personal responsibilities, such as work or family, which impacted their academic performance. A few students noted a lack of encouragement from their networks regarding their pursuit of tech careers. Based on these findings, several recommendations emerged. These include greater flexibility in course structures, more consistent mentor training, and expanded outreach about available campus resources. Additional peer engagement and industry preparation opportunities were also suggested. Overall, REP demonstrates how structured support systems can help underserved students succeed in STEM. The program offers a promising, scalable model for advancing equity in higher education and preparing students for tech careers. Its impact underscores the importance of combining academic, financial, and social support for student success.

ACE2025 Pre-Recorded Virtual Presentations

98379 | *Narratives of Successful Completers in Alternative Learning System in a Metro City in the Philippines*
Rowanne Marie Mangompit, Cebu Technological University, Philippines

There have been many researches on the assessment and evaluation of the alternative learning system abroad and in the northern and southern regions of the Philippines. However, there is a dearth of studies in Central Visayas. This study attempted to fill in this research gap. This study described and analyzed the stories of success of the selected Alternative Learning System (ALS) completers and teachers in Cebu City. This study used the qualitative research method with the three research instruments such as focus group discussions, researcher-made online survey questionnaires, and interview guides. The participants were chosen using the purposive sampling method. For triangulation purposes, the selected four community learning centers in Cebu City were visited to observe their best practices and data mining of ALS Legal Frameworks. Braun & Clarke's (2016) framework was used in the thematic analysis. Results revealed the six themes, namely: positive self-image, self-improvement, opportunity to lead, pursuing Senior High School, and being employed. Based on the conclusion, these are the recommendations: the policy-makers of ALS could find ways to encourage the out-of-school-youth to enroll in the alternative learning systems either in the community learning centers or high schools near their residences. Second, the alternative learning system could be extended and implemented to those who failed to pursue mainstreamed basic education in senior high school. Third, the ALS completers could be given career path orientation for them to decide for the next phase in their lives whether they would apply for a job after completing ALS and passing the Assessment and Equivalency exam.

101386 | *From the Pitch to the Classroom: Football-Linked Inquiry for At-Risk Youth in Mathematics*
Muhammad Sufri Ramli, Tasek Academy and Social Services, Singapore
Gayathiri Sivaraj, Tasek Academy and Social Services, Singapore

At-risk youth often face persistent academic struggles in mathematics, compounded by low confidence, learned helplessness, and disengagement from school. This presentation reports on Project BEAM, a pilot academic coaching intervention that applied inquiry-based learning (IBL) within the context of football, a sport central to the identities and interests of participating youth. Grounded in IBL and Positive Youth Development, the programme was delivered through trained volunteer mentors who used questioning, scaffolding, and football-based problem-solving to foster both academic competence and learning confidence. Sessions were designed to make mathematics meaningful by situating concepts in real-world and interest-driven contexts. Findings are drawn primarily from case studies, mentor reflections, and parental testimonies, supplemented by pre/post survey feedback. Student voices revealed shifts in confidence and identity as learners: one participant shared, "Before BEAM, my confidence was very low… now I keep doing every homework I was given, and kept asking for more work." Parents similarly observed newfound motivation and enjoyment of mathematics. School attendance data also suggested improved engagement, with one student's attendance rising from 49% to 76% over two terms. This exploratory study suggests that embedding IBL within interest-based contexts can re-engage at-risk youth in mathematics learning by connecting academic concepts to meaningful lived experiences. It also highlights the role of structured mentoring and community-based support in sustaining volunteer-driven interventions.

101422 | *The Power of Environments in Social and Emotional Learning*
Jennifer Wong-Powell, JWP Consulting - Inspired by Children, Ethiopia

Compelling research and literature demonstrates the significant impact of social and emotional learning (SEL) on young children. There is a strong correlation between well-developed social and emotional skills and positive academic outcomes, healthy relationships, and the competencies children need to navigate the unfolding future. Adults play a central role in fostering social and emotional skills. Equally important are the environments created for and with children. Emotional, psychological, and physical environments shape children's well-being; their sense of safety and belonging; as well as their engagement and motivation to learn. Environments have the power to facilitate SEL. Why leave it to chance? Using an action-based research approach, this presentation details trends emerging from a workshop series titled "The Power of Environment in Social and Emotional Learning". Through a thematic examination of data, key findings from this research contributes to a deeper understanding of: 1) the application of frameworks to plan for SEL with intentionality and consistency; 2) a focus on building psychological safety in an early years context; and 3) the messages spaces convey about children's social and emotional learning and development. These findings provide a foundation for further exploration of strategies and tools to enhance SEL in early years settings.

101484 | *Designing STEM Success Pathways: Outcomes from the VESTEMic Program*
Kuldeep Rawat, Elizabeth City State University, United States
Gloria Payne, Elizabeth City State University, United States

This paper presents the Vikings Enhanced STEM Innovation and Collaboration (VESTEMic) program's impact on learning experiences, student learning outcomes, and the diverse learner profiles at a rural institution. The VESTEMic program, funded by the National Science Foundation's (NSF's) Historically Black Colleges and Universities Undergraduate Program (HBCU-UP), was designed to improve STEM retention and success rates through interventions that address the unique needs of underrepresented students. Key initiatives—including the Freshmen Bootcamp, Sophomore Bridge Program, STEM Innovation Research Lab, and Hierarchical Mentoring—were developed to create an inclusive and supportive learning environment. The program's focus on learner diversity addressed academic, social, and developmental barriers that can affect STEM persistence. Through adaptive learning tools, peer mentoring, and collaborative research experiences, students gained practical skills, increased confidence, and developed stronger connections with faculty and peers. Qualitative and quantitative data reveal how these tailored interventions fostered academic growth and personal resilience, particularly among first-generation college students and those from underserved backgrounds. The VESTEMic program offers valuable insights for educators and administrators seeking to implement inclusive STEM learning models that meet the diverse needs of today's students. The final paper will discuss detailed program design, outcomes, and lessons learned, highlighting challenges and strategies to support diverse learners in STEM disciplines.

ACE2025 Pre-Recorded Virtual Presentations

Mind, Brain & Psychology: Human Emotional & Cognitive Development & Outcomes within Educational Contexts

100669 | *The Effectiveness of Mindfulness in Alleviating Sport Competition Anxiety Among College Athletes*
Leilani Santos, Jose Rizal University, Philippines
Lloyd Ryan Lagmay, Jose Rizal Unversity, Philippines
Hafsah Macaraya, Jose Rizal University, Philippines

This quantitative study examined the effectiveness of mindfulness in alleviating sport competition anxiety among college athletes. A total of 99 student-athletes from various sports disciplines participated through convenience sampling. Standardized tools, the Five Facet Mindfulness Questionnaire (FFMQ) and the Sport Anxiety Scale-2 (SAS-2), were administered to measure mindfulness and anxiety levels. Results revealed that athletes demonstrated a moderate level of mindfulness (M = 2.99) and mild to moderate sport competition anxiety (M = 2.12). Performance-related concerns such as fear of not playing well (M = 2.52) and letting others down (M = 2.53) were the most prominent anxiety indicators. Correlation analysis showed a significant relationship between mindfulness and sport anxiety ($r = .789$, $p < .001$), suggesting that higher mindfulness awareness was associated with increased recognition of anxious thoughts. ANOVA further revealed significant differences in mindfulness and anxiety based on age and academic year, with younger athletes reporting higher anxiety levels, while no significant differences were observed across sex. The findings highlight the potential of mindfulness as a psychological resource for managing sport-related anxiety, particularly in reducing performance pressure and enhancing emotional regulation. However, reliance on self-report data limits causal interpretation, underscoring the need for intervention-based research to establish the direct impact of mindfulness training for athletes and coaches too. The study recommends integrating structured mindfulness practices into collegiate sports programs and providing tailored workshops for younger athletes who are more vulnerable to anxiety. Future research should explore longitudinal effects and sport-specific interventions to strengthen mental resilience and athletic performance.

101453 | *Developmentally Aligned Board Games for Early Childhood: The Age-Mechanic-Function Framework*
Prisyafandiafif Charifa, Anomali Lab, Indonesia
Syaiful Lokan, Sekolah.mu, Indonesia
Ima Apriliani, Indonesia Endowment Fund for Education Agency, Indonesia

This study introduces the Age-Mechanic-Function (AMF) Framework, a developmentally grounded approach for selecting and designing analog board games for children aged 3-8. We first conducted an integrative review guided by PRISMA to synthesize evidence on early executive functions, spatial reasoning, and social-emotional learning. We then analyzed 20 commercially available games (also verified for Indonesian availability) to abstract core mechanics and map them to targeted developmental functions. The synthesis yields the AMF Matrix, which recommends age-banded mechanics (3–4, 5–6, 7–8) aligned with functional outcomes (e.g., inhibitory control, working memory, cognitive flexibility, theory of mind). A three-member expert panel independently rated game-by-game alignments; agreement was strong across raters, supporting the matrix's reliability for practical use. Findings show that many publisher "box ages" underestimate or overestimate readiness relative to developmental demands; reframing age guidance through AMF clarifies when mechanics like deduction, bluffing, or multi-step planning become instructionally productive. We discuss guided participation as a key amplifier of learning during gameplay, propose AMF as a function-based alternative to box-age ratings, and outline cultural considerations given an Indonesia-based review panel. The framework offers actionable guidance to educators, designers, therapists, and caregivers, and sets an agenda for experimental validation and cross-cultural replication to estimate contextual moderators of age-band fit.

Nurturing Creativity & Innovation: New, Innovative & Radical Education

100939 | *Bridging AI and Psychological Motivation: Faculty Utilization of Learning Tools to Support College Student Success*
Leilani Santos, Jose Rizal University, Philippines
Lloyd Ryan Lagmay, Jose Rizal University, Philippines
Hafsah Macaraya, Jose Rizal University, Philippines
Ma. Margarita Bauyon, Jose Rizal University, Philippines

In the evolving landscape of education, artificial intelligence (AI) has emerged as a transformative tool for enhancing learning experiences and supporting student outcomes. This study examined the relationship between faculty utilization of AI-powered learning tools and their influence on students' psychological motivation, emotional well-being, and academic success in higher education institutions in Metro Manila. Using a quantitative approach, data were collected from 63 randomly selected faculty members across diverse disciplines through a structured, expert-validated questionnaire. Reliability testing yielded excellent internal consistency across all scales ($\alpha = 0.965–0.977$). Descriptive results indicated that faculty generally held neutral perceptions of AI's effectiveness in enhancing student outcomes, with highest ratings for self-paced learning, peer support systems, and attendance tracking features. Pearson correlation analysis revealed significant positive relationships among psychological motivation, emotional well-being, and academic success, with the strongest association observed between emotional well-being and academic success ($r = .914$, $p < .001$). Analysis of variance showed significant differences in emotional well-being and academic success based on demographic profiles, but no significant differences in psychological motivation. The findings suggest that while faculty perceive their AI use as moderate, such tools are nonetheless associated with meaningful improvements in student outcomes. The study concludes that targeted faculty training, inclusive AI implementation, and recognition of demographic influences are essential for maximizing AI's potential in education. Future research should incorporate student perspectives and adopt longitudinal designs to capture the sustained effects of AI integration on both academic and emotional development.

ACE2025 Pre-Recorded Virtual Presentations

Primary & Secondary Education

93757 | *The Influence of Family Functioning, Academic Self-Regulation, and Expectations on Middle School Students' Academic Achievement*
Yubin Fan, University of Srinakharinwirot, Thailand
Sittipong Wattananonsakul, University of Srinakharinwirot, Thailand
Chanya Leesattrupai, Srinakharinwirot University, Thailand

This study investigates the influence of family functioning, academic self-regulation, and expectations on middle school students' academic performance, examining their interactions and predictive roles. A sample of 300 first-year students from two schools in Guiyang City, with balanced gender representation and diverse family backgrounds, was selected. Data were collected using the Family Functioning Scale, Academic Self-Regulation Scale, and Academic Expectations Scale, along with students' final exam scores. Descriptive statistics, correlation analysis, and multiple regression analysis were employed. Results revealed that family functioning, academic self-regulation, and expectations significantly and positively impacted academic performance. Academic self-regulation mediated the relationship, with family functioning indirectly affecting performance through self-regulation. Expectations demonstrated a strong direct effect on academic outcomes. These findings highlight the importance of family support, fostering self-regulation skills, and setting realistic expectations as key strategies for improving academic achievement. Educators and parents can apply these findings by prioritizing family support, fostering students' self-regulation skills, and setting realistic academic expectations to boost academic success.

95461 | *Can Programming Languages Inspire Good Habits? — Abstraction, Memory Management, and More*
D. Tony Sün, Yeshiva University, United States

In most modern programming languages, abstraction goes hand in hand with scoping, the semantic expression of visibility of the code, and C++ has been one of the dominant languages which always decided to implement such abstraction within scopes as opposed to introducing "external" garbage collectors like the ways in Microsoft's C#, Java, and even the generally-purposed Python. This fascinated me while the author was a collegiate learner about over a decade ago, although any technical or philosophical advantages of such design choice were not observed nor reasoned through. I try to give a retrospective sketch with some brief analysis on some pedagogical advantages and the meaningfulness of garbage memory management that are based off scoping, the idea of which sprang initially from a dialogue with my former research advisor in regards of the concerning of, if not worrying for, students' career choices as well as well-being of each-other as human beings in any society. It is argued that to teach young programmers to write organized code in C++ potentially ignites dialogues on the development of healty personality and rigorous character, sociopolitical awareness, and good habits, envisioning a fostering outlook for aspiring active and responsible thinkers for beginner-level computer programmers.

97506 | *Novice Programmers' Scratch Program Structural Analysis*
Li-Ching Chen, National Taiwan Normal University, Taiwan
Jia-Yi Chen, National Taiwan Normal University, Taiwan
Greg Lee, National Taiwan Normal University, Taiwan

In many national curricula, visual programming languages (VPLs) often are adopted for introductory instruction. Comparing to text-based programming, VPL programming allows beginners to focus on programming structures and program logic. However, program auto-judging systems often only assess program output correctness while overlooking other aspect of programs. As a result, structural quality of programs are unknown. In this study, we aim to investigate beginning programmer's program structural quality.
Junior high school students (beginning programmers) were asked to write Scratch programs for tasks that naturally call for the use of nested-if structure. Students' performance were divided into four performance groups based on their program assessment scores: Excellence, Good, Subpar, and Unacceptable. Structural quality of programs in these four groups were then analyzed using Abstract Syntax Trees (ASTs) to extract structural features, which then were converted into text and manually categorized.
Results showed that only 50% of programs in the Excellence group used proper nested-if structure. The other three groups have much lower percentage of programs using the proper nested-if structure. For the Good group, many programs used multiple if structures or other inefficient structures. Although the program output is correct, proper nested-if structure were not used. For the Subpar and Unacceptable groups, few programs used proper structure and many contains simple logical expression errors.
Overall, statistical data show that the use of proper nested-if structure can lead to higher assessment score. In the future, programming practices should focus more on strengthening beginners' understanding and use of proper structures.

101573 | *Implementing Multimodal Pedagogies in the Taiwanese Primary Classroom: A Content-based Instruction on Students' Bilingilual Education*
Ting-Fang Tsai, National Taichung University of Education, Taiwan

This study examines how Taiwanese EFL primary school teachers implement multimodal pedagogies via action research in the classroom. Drawing on Taiwan's bilingual education policy and multiliteracies approach, the paper explores how teachers plan and enact multimodal approaches with content-based instruction, and their impact on students' access to learning, engagement, and confidence. We utilized classroom observation, teacher reflection, student interviews, and self-designed Scale on multimodal bilingual learning efficacy. Results show that multimodal pedagogies successfully combine linguistic, visual, and embodied resources to support classroom interaction and knowledge construction through languages and school subjects. Additionally, students expressed higher self-confidence in learning, desire to participate, and positive outlooks toward their bilingual learning opportunities. The findings afford empirical evidence of the effectiveness of multimodal pedagogies on students' self-efficacy and content knowledge and have implications for curriculum design, teacher professional development, and bilingual education improvement in Taiwan's primary schools. However, more efforts are suggested to assist in constructing supportive learning opportunities from after-school contexts.

ACE2025 Pre-Recorded Virtual Presentations

Professional Training, Development & Concerns in Education

100284 | *Teacher Professional Development for Augmented Reality Based Pace Differentiation with Coaching*
Ken Dong, Beijing Aidi School, China
Russell Hazard, NIT Education, China

This study investigates the perspectives of language teachers new to utilizing augmented reality in their classrooms during a professional development workshop focused on matching pedagogy to technology and content. Specifically, the professional development aimed to explore how augmented reality can be effectively integrated into classrooms to support differentiated instruction, coaching, and enhance student comprehension of abstract ideas. A qualitative was employed, combining classroom observations to gather data on teachers' experiences, challenges, and perceived benefits of using augmented reality with semi-structured interviews. The results indicated that while teachers recognized the potential of augmented reality to provide immersive and interactive learning experiences, they also faced difficulties in aligning the technology with pedagogical objectives. Major conclusions drawn from the study highlight the necessity of comprehensive professional development that not only cover technological affordances but also support teachers in considering pedagogical approaches and how technologies may interact with specific content knowledge. The significance of this research lies in its contribution to understanding the role of tailored professional development in equipping teachers with the confidence and skills needed to effectively incorporate emerging technologies into their teaching strategies, ultimately aiming to foster more dynamic and inclusive educational environments.

101117 | *Equipping English Pre-service Teachers for Technology Integration: Are They Really Ready for 21st Century Classrooms?*
Esin Dündar, Mersin University, Turkey
Ali Merç, Anadolu University, Turkey

This study aims to reveal the extent to which English language teacher education programs in Türkiye equip teacher candidates with the knowledge and skills to integrate technology into their teaching. The participants were 100 English language teacher candidates from 12 state universities in Türkiye and chosen via convenient sampling. The study adopted mixed method design and used "Teacher Preparation Technology Inventory (TPTI)" developed by Riegel (2019) based on International Society for Technology in Education (ISTE) and open-ended survey questions prepared by the researcher. Descriptive statistics were measured for quantitative data while qualitative data were analyzed through the phases of thematic analysis. For each of the subscales, the mean values reflected moderate or occasional engagement in the behavior related to ISTE Standards during the courses they followed within their teacher education program [Learner (M= 3.51), Leader (M= 3.66), Citizen (M= 3.48), Collaborator (M= 3.47), Designer (M= 3.86), Facilitator (M= 3.61), and Analyst (M= 3.51)]. Qualitative findings addressed the need of integrating courses on how to use technology effectively for teacher candidates into their training programs. The study is expected to provide useful feedback on the extent to which prospective teachers are competent in preparing technology-based activities, and therefore on the extent to which English teacher education programs and teacher educators' practices comply with the ISTE standards.

101306 | *Determinants of Career Decision-Making in Taiwanese English Majors*
Chih-An Lu, National Pingtung University of Science and Technology, Taiwan
Chin-hui Chen, National Pingtung University of Science and technology, Taiwan

This study aims to investigate the factors that influence career decision-making among English-major university students in Taiwan. Informed by existing theories of personality traits, social influences, and career development, this research focuses on how personal characteristics (such as MBTI dimensions, emotional regulation, and self-concept clarity) and contextual influences (including family support, peer influence, and informational guidance) affect students' confidence, perceived career fit, and career decision-making difficulties. A quantitative approach was employed using a structured online survey (Google form) targeting English major students from different university types. The survey consists of four sections, and all items are rated using a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). As of now, 68 responses have been collected. Preliminary data reveal that many students have a moderate self-concept clarity but a more neutral alignment between their personality traits and career expectations. On the other hand, the majority of respondents exhibit introverted social preferences. This preference for deeper connections over broader networking might influence how they perceive their career fit and make decisions. However, as the data collection continues, the results will be analyzed using descriptive and inferential statistics via SPSS. This research seeks to contribute to a better understanding of how psychological and social factors interact in shaping the career decisions of English students, as well as to explore career preferences to offer practical insights for curriculum development and career counseling within Taiwanese foreign language programs.

ACE2025 Pre-Recorded Virtual Presentations

Teaching Experiences, Pedagogy, Practice & Praxis

95244 | *Evaluate the Effectiveness of Peer Mentoring in First Year University Programme*
Kim Hung Lam, The Hong Kong Polytechnic University, Hong Kong
Xiaofeng Huang, The Hong Kong Polytechnic University, Hong Kong
Alex Wong, The Hong Kong Polytechnic University, Hong Kong
Larry Ming-cheung Chow, The Hong Kong Polytechnic University, Hong Kong
Anthony Ho, The Hong Kong Polytechnic University, Hong Kong
Mitesh Patel, The Hong Kong Polytechnic University, Hong Kong

Peer mentoring is crucial in education, helping teachers to support students from diverse backgrounds and fostering positive outcomes for students through meaningful interactions with their peers. The transition from high school to college can pose significant challenges for first-year students. To help ease this transition, many universities offer effective programs, such as First Year Seminar (FYS) courses and peer mentoring initiatives. Research shows that peer mentoring, especially in the first year, helps students feel more connected to the university and lead to positive learning outcomes. This study explores how mentees perceive and experience peer mentoring, focusing on its impact on their understanding, motivation, and learning outcomes. A volunteer survey via Microsoft Forms and focused group interview was conducted with mentees randomly in our bachelor program, where experienced students mentored less experienced ones, emphasizing performance, academic growth, knowledge sharing, support, and guidance. Descriptive statistics was used to provide quantitative summaries for studying variables and to understand students' perceived learning experience. Preliminary findings suggest that peer mentoring positively influences students' views on mentoring activities and their motivation. 20 mentees (about 62%) valued mentoring activities like providing resources, sharing experiences, and boosting motivation. In conclusion, peer mentoring enhances students' perceptions, motivation, and engagement. These insights can help improve peer mentoring programs at other universities in Hong Kong.

97248 | *Unlearning the Self: The Ecological Educational Practice of 'Attending'*
Takamitsu Mamashita, University of British Columbia, Canada
Derek Gladwin, University of British Columbia, Canada

This praxis-based paper explores the concept of attending as a philosophical and pedagogical orientation that reimagines learning amid ecological and societal transformation. Derived from the Latin attendere ("to stretch toward"), attending evokes an ecological sensibility rooted in presence, care, and ethical responsiveness to the more-than-human world. Rather than extracting knowledge, it invites learners to be-with, heed, and accompany. In response to growing ecological crises and a dominant culture of objectifying nature, attending "stretches toward" relational, embodied, and practice-based learning.
A key question in outdoor education, for instance, is how to shift from an individual "I" to a collective "we" that mirrors ecological interdependence. Drawing on Japanese philosophy and Zen-informed perspectives, the paper also considers "negative education" – an unlearning of ego-centred assumptions – as a pathway to deeper awareness and kinship of attending with the more-than-human. To attend is to turn inward, paying attention to the "self" and its entanglements.
This reorientation challenges dominant Western educational models by transforming from an ego-centred "self" to a relational "our-self." To explore how this relational self emerges, the paper considers three Japanese-inspired teaching examples that embody attending:
1. Shinrin-yoku (forest bathing), nurturing presence through immersion in nature
2. Suikinkutsu-inspired listening practice that attunes to subtle more-than-human voices
3. Kintsugi reflection, which embraces personal and ecological brokenness as part of relational repair and co-flourishing
Together, these pedagogical practices offer a framework for sustainability education grounded in humility, reciprocity, and shared responsibility within a living world.

97259 | *Collaborative EAP Reading and Writing Activities with Fiction Texts*
Neil Conway, Hosei University, Japan

Research has shown that the extent to which students can demonstrate reading and writing skills will impact not only their EAP academic performance, but also their disciplinary-wide training. Biancarosa and Snow (2004), among others, show that students are positively impacted by training in active reading; this particularly benefits such areas as: the interpretation of complex texts, and knowledge construction in both during- and after-reading reflection, and the construction of a meaningful representation of, and reaction to, ideas within a text. The relationship between fiction reading (and writing responses to such texts) and increased ability in reading comprehension of both fiction and non-fiction texts has been known for some time, yet much of the research literature continues to focus on non-fiction reading texts and EAP lesson-plans; research has also noted that teachers express concerns with lesson-planning to incorporate fiction texts and developing appropriate lesson activities. One useful alternative approach within the typical Reading for Writing (RFW) model of university EAP programs is based on Olson's (2003) cognitive strategies model. This paper, one early outcome of a departmental project concerned with the overhaul and improvement of its English-language delivery strategy, describes a one-semester quasi-experimental research project involving 50 first-year university students reading short fiction texts. Despite initial reluctance toward regular home reading assignments, student feedback was found to support the choice of materials, and reading comprehension and writing (composition) testing showed encouraging results for all students except those who self-reported a low level of participation in the post-term questionnaire.

97496 | *Impacts of Two Collaborative Learning by Teaching Approaches on University Students' Engagement, Motivation, and Metacognition*
Yue Hu, Hangzhou Normal University, China
Pengyun Weng, Hangzhou Normal University, China
Hanxin Ye, Hangzhou Normal University, China
Shuyan Yu, Hangzhou Normal University, China

Collaborative learning by teaching (CLBT) is an active learning approach that integrates collaborative learning with the learning-by-teaching strategy, aiming to enhance student engagement and knowledge acquisition in university settings. However, it challenges many university students as it demands collaborating autonomously and regulating the collaborative learning process. Some students may struggle with task execution and process management. To address this challenge, socially shared regulation scaffolding can be integrated to support CLBT. This study proposed a socially shared regulation scaffolding called Task Guidance Scaffolding (TGS), which divides CLBT tasks into four stages—goal setting, planning, monitoring, and evaluation—and provides specific guiding questions at each stage to help students complete the CLBT learning process. Using a two-group case study design, this research investigated the effects of CLBT and socially shared regulation scaffolding-supported CLBT on university students. Results indicated that both approaches positively affected students' group engagement, motivation, and metacognition. The study emphasizes the potential benefits of CLBT and its integration with socially shared regulation scaffolding on university students, providing practical implications for educators and future research.

97800 | *Ethical Teaching Across Generations: Faculty Practices and Students Perceptions in University in Mandaluyong*
Jennifer Mauntol, Jose Rizal University, Philippines
Gina Agus, Jose Rizal University, Philippines
Ana Belen Cuyugan, Jose Rizal University, Philippines
Analyn Eustaquio, Jose Rizal University, Philippines

This study, conducted at Jose Rizal University in Mandaluyong, investigates ethical teaching practices across generational cohorts among university faculty and examines how students perceive these practices. The research aimed to (1) identify generational differences in ethical teaching practices, (2) explore the relationship between faculty demographics and their ethical practices, (3) assess alignment between students' perceptions and faculty self-reports, and (4) examine the influence of generational traits and socio-cultural factors on ethical pedagogy. Employing a descriptive quantitative design, data were collected via researcher-made questionnaires from faculty and freshman students across five colleges using Slovin sampling. Statistical analyses including weighted means, ANOVA, t-tests, and Spearman's correlation were performed using SPSS. Results indicate that while generational teaching styles vary—e.g., Millennials favoring inclusive and student-centered approaches—core ethical values are uniformly upheld across generations. Students perceived Millennials and Gen Z faculty most favorably in ethical practice, while Baby Boomers were viewed as more authoritarian and less inclusive. A moderate, statistically significant correlation ($r = 0.289$, $p = 0.012$) between students' perceptions and faculty-reported ethical behavior was found, emphasizing the importance of consistent ethical modeling. The study recommends faculty development initiatives, mentorship programs, and curriculum revisions that promote intergenerational ethical continuity while accommodating evolving pedagogical trends.

98319 | *Fostering Literary Comprehension Through Artistic Visualization*
Annagel Diñise Dequito, Toledo National Vocational School, Philippines
Alma Valendez, Cebu Technological University Main Campus, Philippines

The synergistic combination of words and visuals plays a crucial role during the cognitive processing leading to deeper understanding and improved information retention. Hence, it is assumed that transforming abstract ideas into tangible objects can facilitate learners' understanding of the text. Using the explanatory-sequential design, the study looked into the utilization of artistic visualization in improving the reading comprehension skills of Grade 7 Students in Cebu City, Philippines. The convenience sampling method was used in the selection of the research participants and the paired-sample t-test was used to determine the significant difference between the pre-test and post-test scores of the participants. Findings revealed that the process of visualization significantly improved the students' comprehension of the Philippine literary texts in the area of identifying the main idea, the conflict, and the plot of the literary text. It was also revealed that the visualization process facilitated better recall of specific information paving way for higher cognitive processing which ultimately lead to a deeper understanding of the text. Among the insights drawn out of the study include higher motivation, more engaged learning experience, and increased creativity among the learners. Finally, the artistic visualization process can be tailored to facilitate the reading comprehension activities in all learning areas in all year levels.

98612 | *The Utilization of Artificial Intelligence in Shaping College Instruction*
Janice Calugan, University of the Cordilleras, Philippines
Ramir Austria, University of the Cordilleras, Philippines

The academic sector has transformed due to the integration of Artificial Intelligence (AI) in higher education, thus bringing opportunities and challenges. This study aims to determine and investigate the level of awareness among college instructors at the University of the Cordilleras regarding the utilization of AI in their teaching practices, particularly in a trimester-program, and a blended learning environment. Using a quantitative research design, 155 faculty members participated in a researcher-made assessment across four core domains: personalized learning, writing assistance, student engagement, and administrative automation. Findings reveal a moderate awareness in the areas of personalized learning and writing support, and aware in leveraging AI for student engagement and administrative tasks. Limited training, time constraints, and technological unfamiliarity are a few of the gaps that exist aside from AI's potential. These insights imply the necessity of institutional support and targeted professional development to bridge awareness and implementation. The study is significant to understand how AI can reshape instructional practices and highlights the urgent need for systematic strategies to prepare educators for AI-driven academic environments.

ACE2025 Pre-Recorded Virtual Presentations

101418 | *From Research to Practice: Pedagogical Implications of Visualising Students' Mechanistic Reasoning in Biology*
Venus Hung, Chinese University of Hong Kong Shenzhen, China

Teachers often evaluate students' explanations in biology primarily on correctness, which may miss opportunities to recognise the underlying structure of causal reasoning. In a peer-reviewed study published in June 2025, the presenter analysed written responses from Year 10 biology students in Hong Kong. Mechanistic reasoning (MR) was modelled across different topics using link-based diagrams that represent connections between five components: entities, activities, properties, conditions, and organisation. This framework enabled systematic comparison across topics and revealed how students constructed causal links of varying accuracy and relevance. Building on that published work, this presentation shifts focus from empirical findings to pedagogical implications. Three strands are emphasised. First, the characterisation framework provides teachers with a tool to identify both strengths and weaknesses in students' mechanistic reasoning, moving beyond correctness as the sole criterion. Second, reasoning diagrams can function as diagnostic tools, helping teachers visualise hidden aspects of student thinking while supporting students' self-regulation in constructing causal explanations. Third, the variability of reasoning challenges across topics highlights the importance of topic-sensitive scaffolding in science instruction. These implications point towards new directions in classroom evaluation, where the coherence and structure of reasoning chains are recognised alongside factual accuracy. By reframing both evaluation and pedagogy in this way, the presentation connects research on student reasoning with teacher education and classroom practice, offering directions for professional development and instructional design in science education.

101438 | *Enhancing Student Learning Through Professional Learning Communities: A Study on Collaborative Culture and Collective Inquiry in the Senior High Department*
Annie Abucay, Sacred Heart School-Ateneo de Cebu, Philippines
John Carlou Arreglo, Sacred Heart School-Ateneo de Cebu, Philippines

Professional Learning Communities (PLC) is a widely used strategy to foster a collaborative environment among teachers to analyze and improve their instructional practices. Centered on student learning, PLC seeks to increase student achievement and promote professional growth for teachers. Existing literature pointed out that unsuccessful PLCs are characterized by their failure to meet the prerequisites of collaborative culture and collective inquiry. Anchored on this backdrop and working within the framework of DuFour and Schmoker on the PLC journey from lite-right-tight, this study aimed at describing the profile and experiences of the Sacred Heart School-Ateneo de Cebu Senior High School department based on the prerequisites of Professional Learning Communities. The researcher utilized an exploratory sequential mixed-method research design to assess the collaborative culture and collective inquiry among teachers in the department. Using the PLC Assessment Tool coined by Many, Maffoni, Sparks, & Thomas (2021), this study found that the current PLCs of the Senior High Department are categorized as "PLC Right" across all prerequisites. Additionally, qualitative responses analyzed using thematic analysis following the framework introduced by Braun and Clarke (2006) manifest successful implementation of PLC, characterized by deep reflection on results, emphasis on mastery, and improved teacher experience. However, administrative-related issues and inconsistencies in the PLC practices impede teacher collaboration. Owing to the findings of the study, a framework for collaboration and collective inquiry centered on student achievement is recommended for improved PLC practices in the Senior High School department.

Notes

Notes

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Dr Indrani Bhattacharyya, Child in Need Institute (CINI), India
Dr Chia-hui Cheng, National Taiwan Normal University, Taiwan
Dr Ting-ling Lai, Tamkang University, Taiwan
Dr Simon Paxton, Rikkyo University, Japan
Dr Lindelani Qwabe, Mangosuthu University of Technology, South Africa
Dr Daniel Robinson, St. Francis Xavier University, Canada
Dr Mohamadou Bassirou Jean-baptiste Sanfo, University of Hyogo, Japan
Dr Nkosinathi Selekane, University of South Africa, South Africa
Dr Lucy Sibanda, Sol Plaatje University, South Africa
Dr Tayyaba Syed, Virtual University of Pakistan, Pakistan
Professor Guilherme Temporao, Pontifical Catholic University of Rio de Janeiro, Brazil

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The 6th IAFOR International Conference on Arts & Humanities in Hawaii (IICAH2026)

Singapore

February 05-09, 2026

The 6th Southeast Asian Conference on Education (SEACE2026)
The Southeast Asian Conference on Arts & Humanities (SEACAH2026)

Tokyo

March 22-27, 2026

The 12th Asian Conference on Education & International Development (ACEID2026)
The 16th Asian Conference on Psychology & the Behavioral Sciences (ACP2026)
The 12th Asian Conference on Aging & Gerontology (AGen2026)

Washington, DC

April 15-20, 2026

The Washington DC Conference on Education (WCE2026)
The Washington DC Conference on the Social Sciences (WCSS2026)

Tokyo

May 09-13, 2026

The 17th Asian Conference on Arts & Humanities (ACAH2026)
The 16th Asian Conference on Cultural Studies (ACCS2026)
The 17th Asian Conference on the Social Sciences (ACSS2026)

Paris

June 15-19, 2026

The 5th Paris Conference on Education (PCE2026)
The 5th Paris Conference on Arts & Humanities (PCAH2026)

London

July 09-13, 2026

The 14th European Conference on Education (ECE2026)
The 14th European Conference on Arts & Humanities (ECAH2026)

Barcelona

November 05-09, 2026

The 7th Barcelona Conference on Education (BCE2026)
The 7th Barcelona Conference on Arts, Media & Culture (BAMC2026)

Kyoto

November 09-13, 2026

The 7th Kyoto Conference on Arts, Media & Culture (KAMC2026)
The 17th Asian Conference on Media, Communication & Film (MediAsia2026)

Vienna

November 13-17, 2026

The Vienna Conference on Arts and Humanities (VCAH2026)
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