

A C E

# The 15th Asian Conference on Education

November 22-25, 2023 | Join us in Tokyo and Online



Programme &  
Abstract Book

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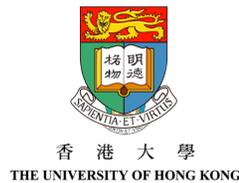
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# Letter of Welcome



Dear Friends and Colleagues,

Welcome to the 15th Asian Conference on Education!

ACE2023 is our flagship conference in Asia, and we are proud to welcome more than 750 people participating from over 65 countries! ACE was IAFOR's very first event, held back in 2009.

The ACE event was held in Osaka (2009-2014), then Kobe (2015-2017) before coming to its current central Tokyo home from 2018. It has gone from strength to strength and is now considered one of the world's best and most diverse education conferences.

Last month, I was invited to attend the 40th Anniversary celebrations of the European Center for Peace and Development in Serbia, a part of the United Nations University for Peace, and was fortunate to hear former president of Costa Rica and Nobel Peace laureate Óscar Arias speak. He underlined the importance of education at the core of civil society in the creation of cultures of dialogue, and those of peace. He spoke of the courage not of picking up arms, but of instead putting them down, and of moving from cultures of war, to those of peace.

As educators involved in the international arena, our work is about constructive dialogue, negotiation, and working towards solutions, whether within classrooms and institutions or within or across communities. This conference is a wonderful opportunity to engage with educators and academics from around the world, and to compare and contrast experiences, make new friends and explore new partnerships across the world.

Education is at the heart of IAFOR's work, and the conference is a great place for academics of all ages and levels to learn from each other, in a forum offering the space for challenging and reflective discussions. We are proud to be holding The Asian Undergraduate Research Symposium (AURS) as a part of ACE again this year, as we encourage and capacity build for the next generation.

I encourage your active participation in this important conference, and in the wider work of IAFOR.

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, Osaka University, 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

# Inspiring Global Collaborations

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

**ACE2023 has attracted 750+ delegates from 65 countries**

**Total Attendees: 754**

**Total Onsite Presenters: 470**

**Total Online Presenters: 214**

**Total Audience: 71**

**Total Countries: 65**

## Attendee Registrations by Country

Philippines: 99	New Zealand: 5	Uganda: 2
Thailand: 78	Bhutan: 4	Belgium: 1
Taiwan: 61	Oman: 4	Cayman Islands: 1
Japan: 47	Brunei: 3	Chile: 1
Singapore: 46	Germany: 3	Colombia: 1
Indonesia: 41	Hungary: 3	Czech Republic: 1
Malaysia: 39	Kuwait: 3	France: 1
China: 36	Nepal: 3	Ghana: 1
United States: 35	Nigeria: 3	Ireland: 1
Hong Kong: 26	Portugal: 3	Israel: 1
Australia: 23	Austria: 2	Jamaica: 1
South Korea: 20	Costa Rica: 2	Macau: 1
South Africa: 19	Croatia: 2	Morocco: 1
United Kingdom: 19	Lithuania: 2	Netherlands: 1
Kazakhstan: 14	Maldives: 2	Pakistan: 1
Vietnam: 13	Mexico: 2	Peru: 1
India: 12	Mongolia: 2	Serbia: 1
United Arab Emirates: 12	Norway: 2	Slovenia: 1
Brazil: 11	Qatar: 2	Sri Lanka: 1
Canada: 10	Saudi Arabia: 2	Tanzania: 1
Bangladesh: 7	Slovakia: 2	Tunisia: 1
Italy: 5	Spain: 2	

**international,  
intercultural,  
interdisciplinary,**

**iafor**



## Become an IAFOR Member

IAFOR provides an excellent personal and professional environment for academics and scholars of all ages and backgrounds to come together and exchange the latest ideas, and inform each other's perspectives through their own cultural and disciplinary background and experiences. We are able to do this thanks to the exceptional network of individuals and institutions around the world who support our work and help shape our exceptional events globally. We emphasise the nurturing and supporting of young academics from different backgrounds, providing mutual advice and guidance, and offer more senior academics the chance to forge working relationships outside of their traditional networks.

In a world where division and strife are underlined and played up 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. We believe that mature human interaction and academic and cultural exchange are essential to offering positive versions of the future, where cooperation happens with individuals and institutions who share a commitment to bridge divides, to being good global citizens, and to making the world a better place.

By becoming a member, you will become a stakeholder in the IAFOR mission of 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:

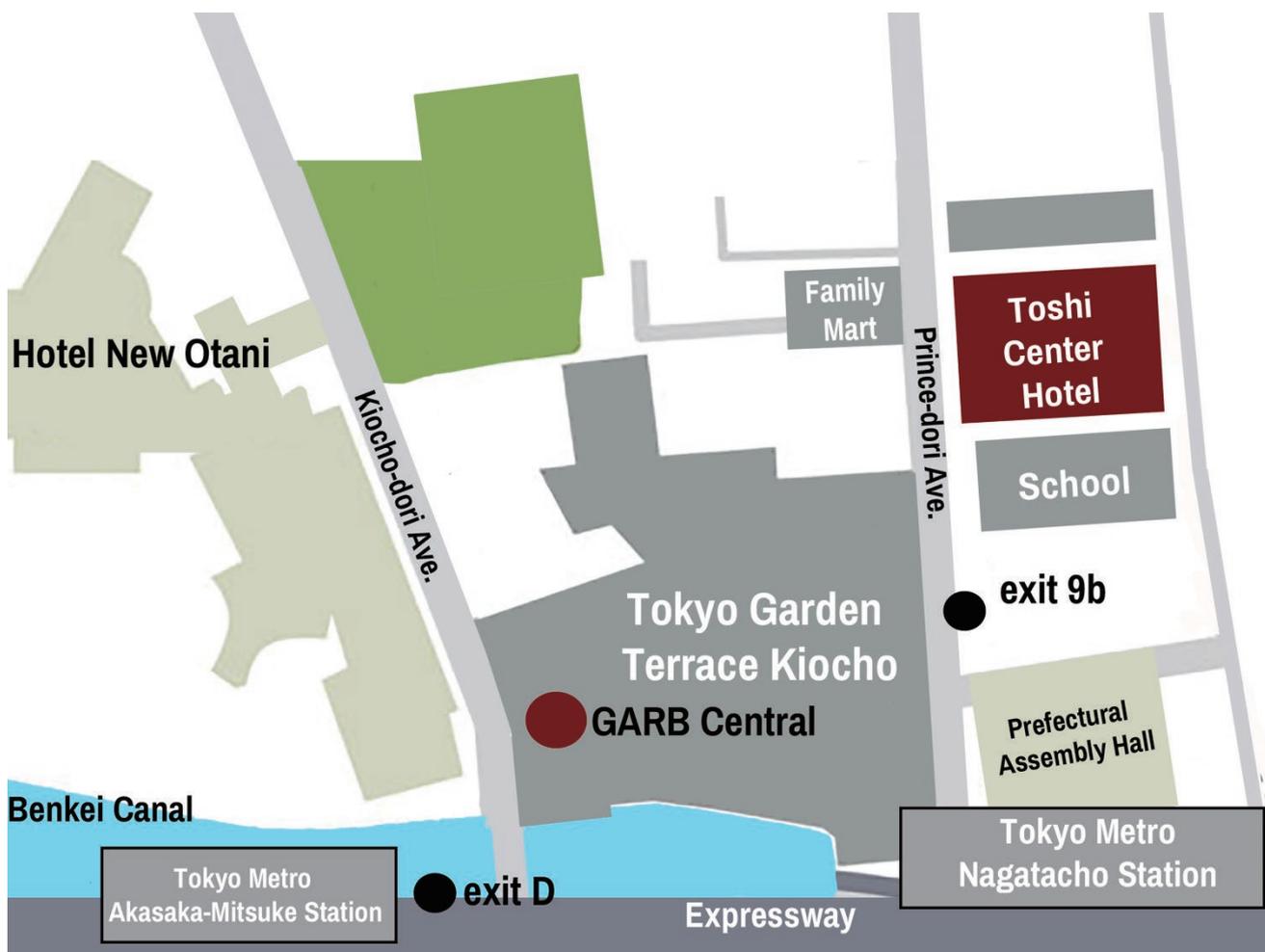
**[www.iafor.org/membership](http://www.iafor.org/membership)**

Conference Venue: Tuesday, November 21 (16:45-19:00)

# Garb Central

Address: Tokyo Garden Terrace 1F, Kioicho 1-3, Chiyoda-Ku Tokyo

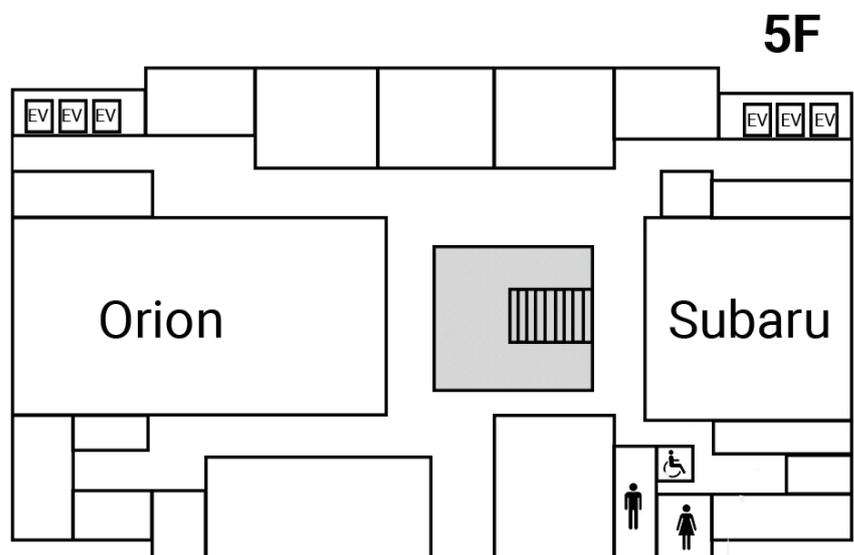
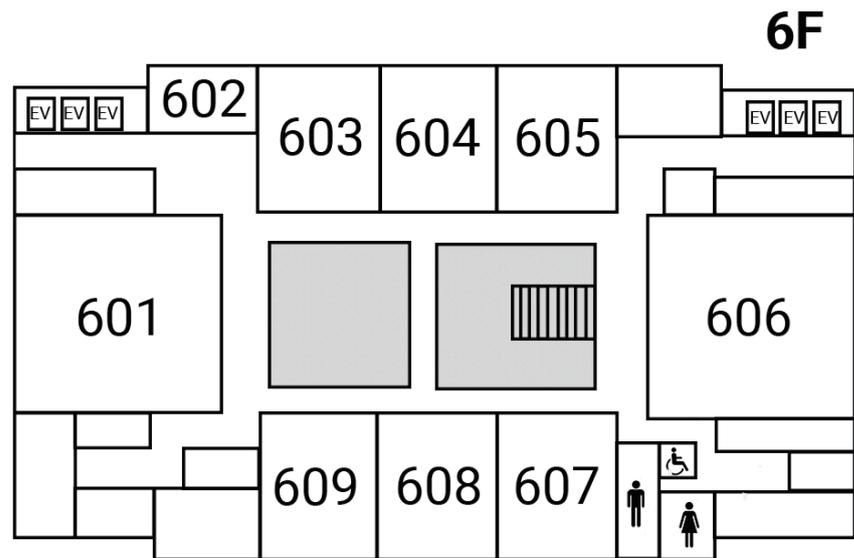
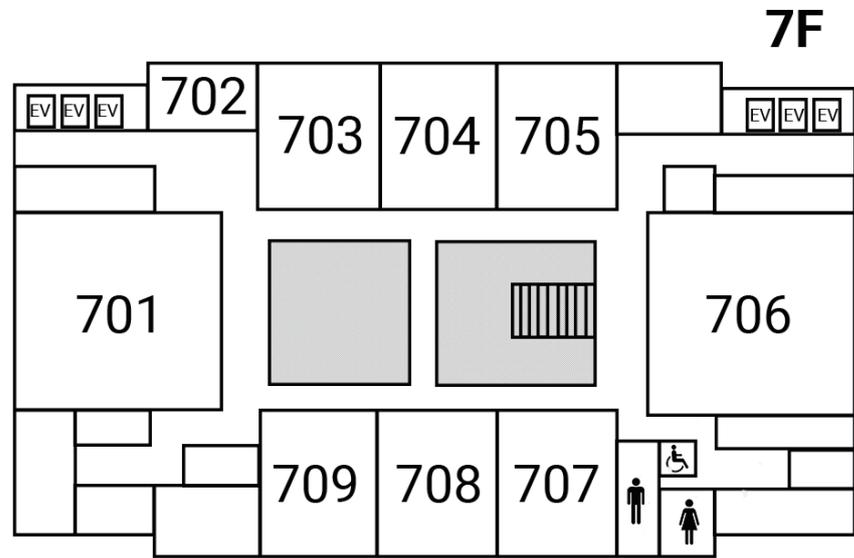
GARB Central, a trendy bar and restaurant located in the heart of Chiyoda Ward, Tokyo, is the venue for the Conference Welcome Reception and Pre-registration. The Conference Welcome Reception is the perfect opportunity for conference delegates to get a head start on the conference and make valuable connections with other attendees.



Conference Venue: Wednesday, November 22 to Friday, November 24

# Toshi Center Hotel

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



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[iafor.org](http://iafor.org)



## November 21 | All times are Japan Standard Time (UTC+9) Tuesday at a Glance

### 13:00-14:00      Kintsugi Workshop | Taku Nakano Ceramic Arts

This hands-on session will guide participants through each meticulous step of the Kintsugi process: from assessing breakage patterns and preparing the special lacquer, to the careful application of metallic powders. Beyond its artistic techniques, the workshop highlights the philosophical dimensions of Kintsugi, drawing parallels between the art form and pedagogical principles of resilience, acceptance, and transformative learning.

*This is a ticketed event, and participation is reserved for registered conference delegates who have purchased a tour ticket from the IAFOR Online Store. Further details are emailed directly to delegates who have purchased entry to this event.*

### 16:45-19:00      Conference Pre-Registration & Welcome Reception | Garb Central

*This is a free event open to all registered delegates.* The Conference Welcome Reception is the perfect opportunity for conference delegates to get a head start on the conference and make valuable connections with other attendees.



## November 22 | All times are Japan Standard Time (UTC+9) Wednesday at a Glance

**Conference Venue: Toshi Center Hotel, Tokyo**

09:30-10:30 Conference Registration | Subaru Room (5F)

10:30-10:35 Announcements | Orion Hall (5F) & Online

**10:35-10:50 Welcome Addresses & Recognition of IAFOR Scholarship Winners | Orion Hall (5F) & Online**

Joseph Haldane, The International Academic Forum (IAFOR), Japan  
Jun Arima, University of Tokyo & IAFOR, Japan

**10:50-11:35 Keynote Presentation | Orion Hall (5F) & Online**

*The Refugee as Teacher: What Universities Cannot Teach Us*  
Farish Noor, University of Malaya, Malaysia

**11:35-12:05 Keynote Presentation | Orion Hall (5F) & Online**

*Navigating Lifelong Learning: A Digital Nomad's Odyssey*  
Lowell Sheppard, Never Too Late Academy, Japan

12:05-12:15 Conference Photograph

12:15-13:30 Lunch Break

**13:30-14:20 Featured Panel Presentation | Orion Hall (5F) & Online**

*Fostering Synergy in Asian Education: Bridging Gaps, Building*

*Connections*

Rachel Chan, Esperanza HK, Hong Kong  
Joseph Haldane, The International Academic Forum (IAFOR), Japan  
Michael Klemm, Singapore Educators Network & EdTech Marketplace, Singapore  
Mike Michalec, EdTech Asia, Singapore



## November 22 | All times are Japan Standard Time (UTC+9) Wednesday at a Glance

Conference Venue: Toshi Center Hotel, Tokyo

- 14:20-15:05**      **Featured Panel Presentation | Orion Hall (5F) & Online**  
*Unleashing the Potential: The Impact of AI and ChatGPT in Revolutionising Education*  
Sean McMinn, The Hong Kong University of Science and Technology (HKUST), Hong Kong  
Murielle El Hajj Nahas, Lusail University, Qatar  
Justin Sanders, Minerva Project  
Tati D. Wardi, Universitas Islam Internasional Indonesia, Indonesia
- 15:05-15:45      Extended Coffee Break | Subaru Room & Foyer (5F)
- 15:45-16:45**      **Conference Poster Session | Orion Hall (5F)**
- 17:00-18:00**      **Special Seminar Sessions**  
Room 603: *Writing a Good Grant Application: Mastering Significance, Innovation, and Approach for Your Career*  
James W. McNally, University of Michigan, United States  
Lowell Sheppard, Never Too Late Academy, Japan  
  
Room 604: *Introduction to the Asian Undergraduate Research Symposium*  
Grant Black, Chuo University, Japan
- 19:00-21:00**      **Conference Gala Dinner | Orion Hall (5F)**  
*This is a ticketed event*



## November 23 | All times are Japan Standard Time (UTC+9) Thursday at a Glance

**Conference Venue: Toshi Center Hotel, Tokyo**

08:30-09:00 Conference Registration (7F)

**09:00-10:40**

### **Onsite Parallel Session 1**

Room 603: International Education

Room 604: Educational Policy, Leadership, Management & Administration

Room 605: Interdisciplinary, Multidisciplinary & Transdisciplinary Education

Room 607: Learning Experiences, Student Learning & Learner Diversity

Room 608: Assessment Theories & Methodologies

Room 701: Workshops | Foreign Languages Education & Applied Linguistics

Room 703: Teaching Experiences, Pedagogy, Practice & Praxis

Room 704: Professional Training, Development & Concerns in Education

Room 705: Design, Implementation & Assessment of Innovative Technologies in Education

Room 707: Foreign Languages Education & Applied Linguistics

Room 708: Education & Difference: Gifted Education, Special Education, Learning Difficulties & Disability

10:40-10:55

Coffee Break

**10:55-12:35**

### **Onsite Parallel Session 2**

Room 603: Education & Politics

Room 604: Educational Policy, Leadership, Management & Administration

Room 605: Teaching Experiences, Pedagogy, Practice & Praxis

Room 607: Learning Experiences, Student Learning & Learner Diversity

Room 608: Assessment Theories & Methodologies

Room 701: Workshops | Learning Experiences, Student Learning & Learner Diversity

Room 703: Teaching Experiences, Pedagogy, Practice & Praxis

Room 704: Professional Training, Development & Concerns in Education

Room 705: Design, Implementation & Assessment of Innovative Technologies in Education

Room 707: Foreign Languages Education & Applied Linguistics

Room 708: Education & Difference: Gifted Education, Special Education, Learning Difficulties & Disability



## November 23 | All times are Japan Standard Time (UTC+9) Thursday at a Glance

**Conference Venue: Toshi Center Hotel, Tokyo**

12:35-12:50 Coffee Break

**12:50-14:05 Onsite Parallel Session 3**

Room 603: Socio-Economic Challenges in Education

Room 604: Knowledge Creation, Preservation & Access

Room 605: Primary & Secondary Education

Room 607: Learning Experiences, Student Learning & Learner Diversity

Room 608: Educational Research, Development & Publishing

Room 701: Workshop | Education, Sustainability & Society: Social Justice, Development & Political Movements

Room 703: Higher Education

Room 704: Professional Training, Development & Concerns in Education

Room 705: Design, Implementation & Assessment of Innovative Technologies in Education

Room 707: Foreign Languages Education & Applied Linguistics

Room 708: Mind, Brain & Psychology

14:05-14:20 Coffee Break

**14:20-16:00 Onsite Parallel Session 4**

Room 603: Educational Leadership: Social Justice & Development

Room 604: Education & Society: Human Capital Development

Room 605: Teaching Experiences, Pedagogy, Practice & Praxis

Room 607: Learning Experiences, Student Learning & Learner Diversity

Room 608: Assessment Theories & Methodologies

Room 701: No Sessions

Room 703: Challenging & Preserving: Culture

Room 704: Professional Training, Development & Concerns in Education

Room 705: Design, Implementation & Assessment of Innovative Technologies in Education

Room 707: Foreign Languages Education & Applied Linguistics

Room 708: Mind, Brain & Psychology



## November 23 | All times are Japan Standard Time (UTC+9) Thursday at a Glance

**Conference Venue: Toshi Center Hotel, Tokyo**

16:00-16:15      Coffee Break

**16:15-17:55**

**Onsite Parallel Session 5**

Room 603: Interdisciplinary, Multidisciplinary & Transdisciplinary Education

Room 604: Educational Policy, Leadership, Management & Administration

Room 605: Teaching Experiences, Pedagogy, Practice & Praxis

Room 607: Learning Experiences, Student Learning & Learner Diversity

Room 608: Educational Research, Development & Publishing

Room 701: Poster Session | The Asian Undergraduate Research Symposium (AURS11)

Room 703: Challenging & Preserving: Culture, Inter/Multiculturalism & Language

Room 704: Counselling, Guidance & Adjustment in Education

Room 705: Design, Implementation & Assessment of Innovative Technologies in Education

Room 707: Foreign Languages Education & Applied Linguistics

Room 708: Higher Education

17:55-18:10

Coffee Break

**18:10-19:25**

**Onsite Parallel Session 6**

Room 603: Higher Education

Room 604: Higher Education

Room 605: Teaching Experiences, Pedagogy, Practice & Praxis

Room 607: Teaching Experiences, Pedagogy, Practice & Praxis

Room 608: Teaching Experiences, Pedagogy, Practice & Praxis

Room 701: No Sessions

Room 703: Learning Experiences, Student Learning & Learner Diversity

Room 704: Learning Experiences, Student Learning & Learner Diversity

Room 705: No Sessions

Room 707: No Sessions

Room 708: Nurturing Creativity & Innovation: New, Innovative & Radical Education



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## November 24 | All times are Japan Standard Time (UTC+9) Friday at a Glance

**Conference Venue: Toshi Center Hotel, Tokyo**

08:30-09:00 Conference Registration (7F)

**09:00-10:40**

**Onsite Parallel Session 1**

Room 603: Foreign Languages Education & Applied Linguistics  
Room 604: Higher Education  
Room 605: Gender in Education  
Room 607: Learning Experiences, Student Learning & Learner Diversity  
Room 608: Language Development & Literacy  
Room 701: Curriculum Design & Development  
Room 703: Adult, Lifelong & Distance Learning  
Room 704: Teaching Experiences, Pedagogy, Practice & Praxis  
Room 705: Education Policy, Leadership, Management & Administration  
Room 708: Primary & Secondary Education

10:40-10:55

Coffee Break

**10:55-12:35**

**Onsite Parallel Session 2**

Room 603: Foreign Languages Education & Applied Linguistics  
Room 604: Higher Education  
Room 605: Design, Implementation & Assessment of Innovative Technologies in Education  
Room 607: Learning Experiences, Student Learning & Learner Diversity  
Room 608: Language Development & Literacy  
Room 701: Teaching Experiences, Pedagogy, Practice & Praxis  
Room 703: Adult, Lifelong & Distance Learning  
Room 704: Curriculum Design & Development  
Room 705: Learning Experiences, Student Learning & Learner Diversity  
Room 708: Primary & Secondary Education



## November 24 | All times are Japan Standard Time (UTC+9) Friday at a Glance

**Conference Venue: Toshi Center Hotel, Tokyo**

12:35-12:50 Coffee Break

**12:50-14:30**

### **Onsite Parallel Session 3**

Room 603: Foreign Languages Education & Applied Linguistics

Room 604: Higher Education

Room 605: Design, Implementation & Assessment of Innovative Technologies in Education

Room 607: Learning Experiences, Student Learning & Learner Diversity

Room 608: Independent Learning

Room 701: Teaching Experiences, Pedagogy, Practice & Praxis

Room 703: Teaching Experiences, Pedagogy, Practice & Praxis

Room 704: Curriculum Design & Development

Room 705: Learning Experiences, Student Learning & Learner Diversity

Room 708: Teaching Experiences, Pedagogy, Practice & Praxis

14:30-14:45

Coffee Break

**14:45-16:00**

### **Onsite Parallel Session 4**

Room 603: Mind, Brain & Psychology

Room 604: Higher Education

Room 605: Design, Implementation & Assessment of Innovative Technologies in Education

Room 607: Learning Experiences, Student Learning & Learner Diversity

Room 608: Teaching Experiences, Pedagogy, Practice & Praxis

Room 701: Teaching Experiences, Pedagogy, Practice & Praxis

Room 703: Teaching Experiences, Pedagogy, Practice & Praxis

Room 704: Teaching Experiences, Pedagogy, Practice & Praxis

Room 705: Learning Experiences

Room 708: Interdisciplinary, Multidisciplinary & Transdisciplinary Education

16:05-16:15

Conference Closing Address | Room 701 (7F)



## November 25 | All times are Japan Standard Time (UTC+9) Saturday at a Glance

Conference Venue: Online via Zoom

09:00-09:05 Message from IAFOR

**09:05-09:50** **Featured Panel Presentation | Room A (Live Stream)**  
*No One Left Behind: Advocating for Equitable Opportunities for Success in Tertiary Education*  
Susie Kung, Manukau Institute of Technology, New Zealand  
Mary Moeke, Manukau Institute of Technology, New Zealand  
Yvonne Ulaesi, AUT University, New Zealand

09:50-10:00 Break

**10:00-11:40** **Online Parallel Session 1**  
Room A (Live Stream): Teaching Experiences, Pedagogy, Practice & Praxis  
Room B (Live Stream): Professional Training, Development & Concerns in Education  
Room C (Live Stream): Design, Implementation & Assessment of Innovative Technologies in Education  
Room D (Live Stream): Education Development: Policy & Experiences  
Room E (Live Stream): Education & Difference: Gifted Education, Special Education, Learning Difficulties & Disability  
Room F (Live Stream): Foreign Languages Education & Applied Linguistics  
Room G (Live Stream): Teaching Experiences, Pedagogy, Practice & Praxis

11:40-11:55 Break

**11:55-13:35** **Online Parallel Session 2**  
Room A (Live Stream): Teaching Experiences, Pedagogy, Practice & Praxis  
Room B (Live Stream): Learning Experiences, Student Learning & Learner Diversity  
Room C (Live Stream): Design, Implementation & Assessment of Innovative Technologies in Education  
Room D (Live Stream): Education and Contemporary Development Issues  
Room E (Live Stream): Higher Education  
Room F (Live Stream): Foreign Languages Education: Teaching, Assessment, and Development  
Room G (Live Stream): Learning Experiences, Students Learning & Learner Diversity



## November 25 | All times are Japan Standard Time (UTC+9) Saturday at a Glance

**Conference Venue:** Online via Zoom

13:35-13:50 Break

**13:50-15:30**

**Online Parallel Session 3**

Room A (Live Stream): Teaching Experiences, Pedagogy, Practice & Praxis

Room B (Live Stream): Learning Experiences, Student Learning & Learner Diversity

Room C (Live Stream): Interdisciplinarity & Learning Productivity Development

Room D (Live Stream): Professional Training

Room E (Live Stream): Challenging & Preserving: Culture, Inter/multiculturalism & Language

Room F (Live Stream): Foreign Languages Education & Applied Linguistics

Room G (Live Stream): Higher Education

15:30-15:45 Break

**15:45-17:25**

**Online Parallel Session 4**

Room A (Live Stream): Curriculum Design & Development

Room B (Live Stream): Learning Experiences, Student Learning & Learner Diversity

Room C (Live Stream): Innovative & Interdisciplinary Teaching in Practice

Room D (Live Stream): Education & Inclusive Development

Room E (Live Stream): Educational Policy, Leadership, Management & Administration

Room F (Live Stream): Counselling, Guidance & Adjustment in Education

Room G (Live Stream): No Sessions

17:25-17:30 Message from IAFOR



# General Information

## Registration Desk

You will be able to pick up your name badge at the Conference Registration Desk at the times listed below.

- Tuesday, November 21 – 16:45-19:00 – Garb Central
- Wednesday, November 22 – 09:30-17:30 – Toshi Center Hotel | Subaru Room (5F)
- Thursday, November 23 – 08:30-19:00 – Toshi Center Hotel | (7F)
- Friday, November 24 – 08:30-15:30 – Toshi Center Hotel | (7F)
- Saturday, November 25 | No in-person registration

If you have any questions or concerns, IAFOR staff and volunteers will happily assist you in any way they can.

## Name Badges

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

## Online Schedule

The full conference schedule (including abstracts) and conference programme are available on the conference website.

## Conference Survey

Please take a few moments to fill out our conference survey at the end of the conference.





## General Information

### Refreshment Breaks

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

### Undergraduate Symposium

The 11th Asian Undergraduate Research Symposium (AURS) will be held on Thursday, November 23 during ACE. AURS offers undergraduate students a unique opportunity to present their research in a professional conference environment. The AURS Poster Session will take place on **Thursday, November 23** in Room 701 (16:15-17:55). There will be a special information session on **Wednesday, November 22** in Room 604 (17:00-18:00). Find out about AURS and how your students can get involved in future events.

We hope you can join us for both of these exciting events.

### Connecting to WiFi

There is a free WiFi internet connection at the conference venue. However, this can be unreliable so we would strongly suggest that you do not rely on a live connection for your presentation.

Network Name: Toshicenter\_Hotel\_Wi-Fi

Password: toshi19590302

Please note that the WiFi can be unreliable so we would strongly suggest that you do not rely on a live connection for your presentation.

### 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 – [www.iafor.org/about/privacy-policy](http://www.iafor.org/about/privacy-policy)

# 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 on 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.

Full text submission is due by **Friday, January 5, 2024**, through the online system. The proceedings will be published on **Friday, February 9, 2024**.

## Certification

Certificates of Presentation, Session Chair certification, Certificates of Attendance, as well as Reviewer certification, will be sent out by email in a PDF format after the conference.

## 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.

## 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 watch these presentations and provide feedback through the video comments.



# IAFOR 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, 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 Arts & Humanities*

*IAFOR Journal of Cultural Studies* (Scopus indexed)

*IAFOR Journal of Education* (Scopus indexed)

*IAFOR Journal of Literature & Librarianship* (Scopus indexed)

*IAFOR Journal of Psychology & the Behavioral Sciences*

**If you would like more information about any of IAFOR's publications, please visit [www.iafor.org/publications](http://www.iafor.org/publications)**

# ACE2023 IAFOR 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. Awards are based on the appropriateness of the educational opportunity in relation to the applicant's field of study, financial need, and contributions to their community and to IAFOR's mission of interdisciplinarity. Scholarships are awarded based on availability of funds from IAFOR and vary with each conference. Find out more about IAFOR grants and scholarships: [www.iafor.org/financial-support](http://www.iafor.org/financial-support)

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.

## **Innocent Anazia (Virtual Presentation)**

73496 | *At-risk Students in Delta State, Nigeria: An Exploratory Study on Home-school Partnership in Rural Secondary Schools*

Innocent Anazia is currently studying a Doctoral Degree in Education at Ulster University, United Kingdom.

## **Nicole Capule-Malabanan (Virtual Presentation)**

69895 | *Characterizing an Emergency-Responsive Unit Plan in Senior High School Literature Courses*

Nicole Capule-Malabanan is a Postgraduate Student at the Philippine Normal University, Philippines.

## **Judy Mae Castillo (Oral Presentation)**

73901 | *Integrating the Fully Online Learning Community Model with Digital Formative Assessment Tools and Student Response Systems in Teaching Geometric Optics*

Judy Mae Castillo is a PhD student in Physics Education at the University of San Carlos, Philippines.

## **Samwel Credo (Virtual Presentation)**

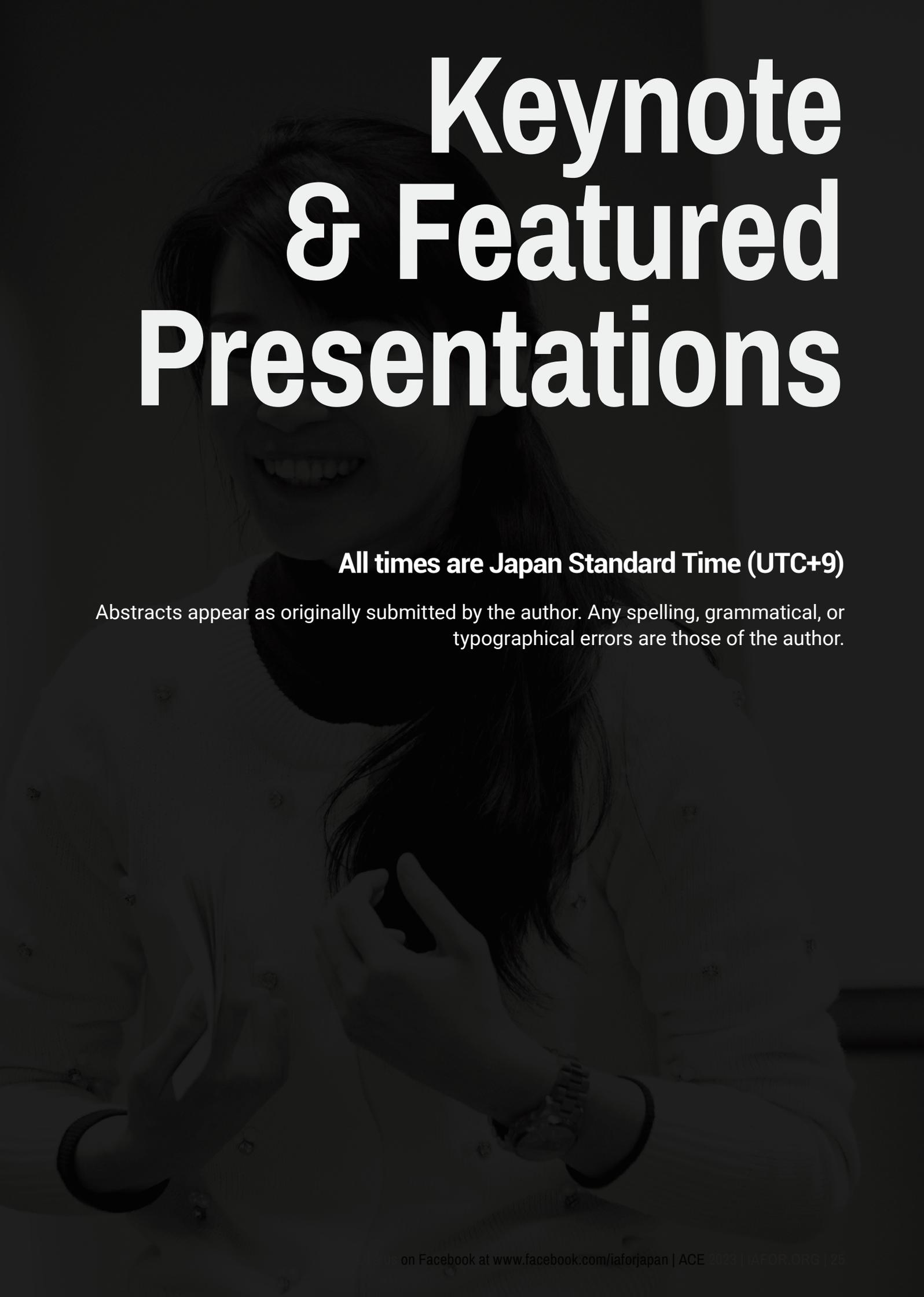
73195 | *Higher Education: Quality Assurance Practices for Enhancing University Students' Soft Skills in Tanzania*

Samwel Credo is an Assistant Lecturer and a PhD Candidate at the University of Dodoma, Tanzania.

## **Diep Nguyen (Oral Presentation)**

73936 | *Education and e-Learning Activities During the COVID-19 Pandemic Through the Lens of Vietnamese Undergraduate Students*

Diep Nguyen is a Researcher working at the Institute of Theoretical and Applied Research, Duy Tan University, Vietnam.



# Keynote & Featured Presentations

**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.

# Keynote Presentation: Farish Noor The Refugee as Teacher: What Universities Cannot Teach Us

Wednesday, November 22, 2023 | 10:50-11:35 | Orion Hall (5F) & Online

It has often been said that we live in chaotic and unpredictable times, and all over the world governments have begun to address the question of social resilience and how societies, as well as individuals, can cope with the challenges that we face today. In the social sciences and the humanities, great strides have been made in terms of furthering the boundaries of knowledge and knowledge-production, where new forms of knowledge (once deemed irrelevant or even unworthy) have now come to be regarded as valid and important. Oral history, material history, and gendered history are now part and parcel of the mainstream discipline of history, and similar developments are taking place in other disciplinary fields as well. As we seek to expand our frontiers of knowledge, there remain groups that have been relatively neglected. One community in particular - refugees - have been studied to some extent, but the manner in which they have been framed - sometimes as an economic burden, sometimes as a potential threat to security - has robbed them of both their voice and identity. Yet refugees are a glaring reminder of the failure of the world over so many political systems, and they also embody the spirit of resilience and determination that some societies lack. In this presentation I will be calling for the recognition of refugees as human actors and agents, imbued with identity, purpose and history, and who also bring with them vital lessons that can be learned. Rather than seeing refugees and the global 'refugee crisis' as a 'crisis', I am calling for a more nuanced, inclusive and empathetic approach to the study of refugees today, who in many ways are knowledge-bearers and knowledge-producers in their own right.



## Farish Noor

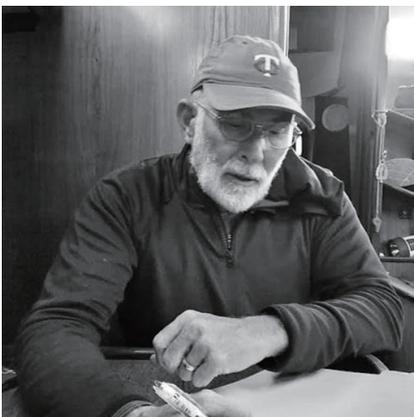
Professor Farish A. Noor is Professor of History at the Department of History, Faculty of Arts & Social Sciences FASS, University of Malaya, Malaysia. His main area of work has been Southeast Asian history, with a special focus on colonialism in Southeast Asia. His recent works include *Data Collecting in Colonial Southeast Asia: Framing the Other* (Amsterdam University Press, 2020) and *Before the Pivot: America's Encounters with Southeast Asia 1800-1900* (Amsterdam University Press, 2019).

# Keynote Presentation: Lowell Sheppard Navigating Lifelong Learning: A Digital Nomad's Odyssey

Wednesday, November 22, 2023 | 11:35-12:05 | Orion Hall (5F) & Online

In an ever-evolving world, the pursuit of knowledge knows no age or boundaries. Join me on a voyage of discovery as I share my personal odyssey through lifelong learning.

Four years ago, Lowell embarked on an unconventional journey, leaving behind the comforts of a traditional lifestyle to live, work and learn aboard a sailboat. This transition to a digital nomadic existence not only redefined his way of life but also presented a profound learning curve. Lowell's talk at the IAFOR Education Conference in Tokyo this November will explore the transformative power of lifelong learning in the context of a "never-too-late" journey. Through anecdotes, practical strategies, and reflections on his voyage, his talk will inspire educators, learners, and digital nomads alike to embrace the idea that learning is not confined to a classroom or a certain age. Lifelong learning is a dynamic force that propels us forward, enabling us to adapt, connect, and thrive in an ever-changing world. Lowell's talk at the conference coincides with the release of his latest book *Dare to Dream*, a four step plan to redesign your life. A companion book to an upcoming History Channel Series of the same name.



## Lowell Sheppard

Lowell Sheppard is an author, speaker, social entrepreneur, former minister, Fellow of the Royal Geographic Society, husband, father, long-distance cyclist, and aspiring sailor. Lowell has spent his entire adult life working with established non-government organisations (also known as non-profit societies) and in several NGO start-ups. As founder of HOPE International Development Agency Japan, Lowell has seen the growth of HOPE-JP to be in the top 2% of charitable organisations in Japan with the coveted *nintei* certified tax-deductible status.

Lowell has served for the last twenty years as an informal advisor to companies and boards in the area of ethical decision making and thought leadership with a focus on community legacy. He has dedicated much of his life to social and environmental improvement projects.

As an author, his book *Never Too Late* (Lion Hudson PLC, 2005) was published in four languages and was the catalyst for his latest social enterprise called the Never Too Late Academy. His latest book, *Dare to Dream*, is being published in November 2023 in the UK and next spring in the US.

Lowell moved onto a sailboat two years ago in Tokyo and is currently sailing full time around Japan, working as a digital nomad running small companies.

**Panel Presentation: Rachel Chan, Joseph Haldane, Michael Klemm,  
Mike Michalec**

# **Fostering Synergy in Asian Education: Bridging Gaps, Building Connections**

**Wednesday, November 22, 2023 | 13:30-14:20 | Orion Hall (5F) & Online**

This panel session aims to facilitate a dynamic discussion among leaders from diverse education networks across Asia. The session will focus on the crucial importance of fostering collaboration and synergy among various stakeholders in the field of education, including school leadership and administration, faculty and teachers, ed tech providers, funders, and education researchers. The panel will explore the potential of bridging gaps between these groups and creating platforms for meaningful connections. The session will delve into the need for stakeholders to consider and understand each other's perspectives, highlighting the potential for innovation, knowledge exchange, and enhanced educational practices that result in better learning outcomes for students. Moreover, the panel will emphasise the significance of learning from failures and discussing what hasn't worked and why. By openly addressing challenges and examining the reasons behind ineffective strategies or initiatives, participants can collectively work towards improved solutions and outcomes. This interactive session aims to inspire participants to seek more opportunities to actively engage with diverse stakeholders, consider new approaches, and explore effective ways of collaboration for the betterment of education in Asia.



## **Rachel Chan**

Rachel Chan is a slash and a tripartite professional, working actively in the consulting, NGO and academic world. She has embarked on a continuous journey of discovery and transformation, working first in the Administrative Service of the Hong Kong Government, moving to marketing in the Hong Kong Trade Development Council and then consulting with the setting up of InnoFoco in 2007 to drive the development of strategic design, innovation and entrepreneurship in Hong Kong. In August 2018, she co-founded Esperanza (an NGO) with Mr John C Tsang, the former Financial Secretary of HKSAR. Rachel is a passionate advocate of the value of creativity, design

and innovation, and the imperative of multi-disciplinary and cross-sector collaboration in transforming Hong Kong into a digital and knowledge economy in the twenty-first century. Rachel is a graduate of the University of Hong Kong and a Sloan Fellow of the London Business School.



## **Mike Michalec**

Mike is the Founder of EdTech Asia, a regional network of senior level innovators, investors, and professionals from the EdTech and Education sectors. EdTech Asia provides capacity building services through workshops, knowledge assets, community building, and an annual summit for those interested in strategic business growth and/or sustainable impact. Mike holds a Master of Education degree from George Mason University and a Bachelor of Science degree from the University of Colorado.



## Joseph Haldane

Joseph Haldane is the founder, chairman, and CEO of IAFOR. He is responsible for devising strategy, setting policies, forging institutional partnerships, implementing projects, and overseeing the organisation's global business and academic operations. Dr Haldane has a PhD from the University of London in nineteenth-century French studies (ULIP/RHUL), and has research interests in world history and politics; international education; and governance and decision making. Since 2015, he has been a Guest Professor at Osaka University's School of International Public Policy (OSIPP), and Co-Director of the OSIPP-IAFOR Research Centre since 2017.

In 2020, Dr Haldane was elected Honorary Professor of University College London (UCL) through the Bartlett School of Sustainable Construction, and full Professor in the United Nations Peace University's European Center for Peace and Development in 2022. A member of the World Economic Forum's Expert Network for global governance, he holds visiting professorships at Belgrade and Doshisha Universities where he teaches ethics and governance. He is a member of the International Advisory Council of the Department of Educational Foundations at the University of Hawai'i at Mānoa.

Dr Haldane has had full-time faculty positions at the Université Paris-Est Créteil, Sciences Po Paris, and Nagoya University of Commerce and Business, as well as visiting positions at the French Press Institute (Université Paris-Panthéon-Assas), and the Schools of Journalism of Sciences Po Paris and Moscow State University.

Dr Haldane has been invited to speak at universities and conferences globally, including the UN HQ in New York, and advised universities, NGOs and governments on issues relating to international education policy, public-private partnerships, and multi-stakeholder forums. He was the project lead on the 2019 Kansai Resilience Forum, held by the Japanese Government through the Prime Minister's Office, and oversaw the 2021 Ministry of Foreign Affairs commissioned study on Infectious Diseases on Cruise Ships.



## Michael Klemm

Michael Klemm is an education professional with extensive experience in international education, employability, education technology and entrepreneurship. In 2020, he founded and currently heads the Singapore Education Network (SEN), an alliance of 1,500+ educational professionals in Singapore, Asia, and beyond. In 2023, SEN launched the e-commerce platform EdTech Marketplace Asia, offering technology-enabled products for the education sector in Asia. Michael is also a Venture Partner - Higher Education & EdTech for Education Consultancy for EDT & Partners. He also mentors EdTech Startups in accelerators Eduspaze and 500Global, as well as Singapore University of Social Science's Venture Builder Programme.

Michael was listed among the Top 100 influencers in EdTech 2023/24 by EdTech Digest.

Having worked for the Training Institute's NTUC LearningHub, the National University of Singapore, Minerva University and International Labour Organization in several countries across Asia (Singapore, India, Thailand, Sri Lanka, Indonesia), he has gained substantial expertise in the education and development sector.

Panel Presentation: Murielle El Hajj Nahas, Sean McMinn, Justin Sanders, Tati D. Wardi

# Unleashing the Potential: The Impact of AI and ChatGPT in Revolutionising Education

Wednesday, November 22, 2023 | 14:20-15:05 | Orion Hall (5F) & Online

The incorporation of artificial intelligence (AI) into the educational field is revolutionising conventional teaching and learning methods. AI's adaptability and personalised approaches cater to the diverse needs of students, leading to improved overall learning outcomes. Moreover, AI streamlines administrative tasks, providing educators with more time and resources to engage in meaningful interactions with students. As AI continues to evolve, it possesses the potential to create an education system that is more inclusive, effective, and responsive to the rapidly changing world. Among the most versatile AI tools making waves in education are chatbots, with ChatGPT leading the way based on its advanced GPT-3.5 architecture. The adaptability and versatility of ChatGPT offer immense potential to revolutionise the learning experience for both educators and students. However, as we embrace this transformation, it becomes necessary to address ethical concerns and ensure equitable access to AI technologies to preserve its positive impact in the educational sector. The purpose of this panel discussion is to emphasise that embracing AI's potential in education is not merely an option, but a strategic imperative to shape a brighter future for the next generation of learners and educators. Throughout the discussion, various examples from different educational institutions will be showcased, focusing specifically on the policies and practices related to implementing AI, particularly ChatGPT, among faculty members and students. The conversation will also analyse the exciting possibilities that arise from integrating ChatGPT with the educational field, exploring how ChatGPT can serve as a nurturing virtual tutor, offering guidance to students, tailoring learning experiences to their individual needs, and boosting their engagement and motivation. Furthermore, the panel will explore the transformative impact of leveraging ChatGPT's capabilities, potentially revolutionising educational paradigms to create interactive and efficient learning environments.



## Murielle El Hajj Nahas

Dr Murielle El Hajj Nahas holds a PhD in French Language and Literature from the Lebanese University, Lebanon. She is currently Assistant Professor and Director of Lusail University Press (LU Press) at Lusail University, Qatar. She is also Associate Editor of the *IAFOR Journal of Literature & Librarianship* and the *IAFOR Journal of Education* (Language Learning in Education issues), as well as Editorial Board Member of *In Analysis, revue transdisciplinaire de psychanalyse et sciences*, Elsevier Masson SAS, France. Her domain of research focuses on psychoanalysis of literature, the perspective on the unconscious in literary study, the roles of the instances involved in analytical/critical

praxis, and the relation between literature and psychoanalysis. Her research interests include analysis of written narrative structure and focalisation; comparative studies of literary genres; discourse analysis and semantics; French linguistics, literature, modernism, and postmodernism studies; gender studies; literary semiotics and semiology; psychoanalysis; psychoanalytic criticism and text analysis; rhetoric and stylistics; and schizoanalysis. She has published book chapters, original articles, academic interviews, translated articles, book reviews and analyses, as well as poems. She has also authored a contemporary theatre book titled *Fragments chaotiques* published by Les impliqués Éditeur, France.



## Sean McMinn

Dr Sean McMinn, the Director of Center for Education Innovation at The Hong Kong University of Science and Technology (HKUST), has over 20 years experience in higher education. He has won the 2016 SHSS Teaching Excellence Award and the 2007 Teaching Innovation Award for his work with podcasts and education at HKUST. Sean holds a PhD in E-Research and Technology Enhanced Learning from Lancaster University, United Kingdom, and has taken up various teaching and leadership roles at the HKUST and the Hong Kong Polytechnic University. He has interests in educational technology, artificial intelligence, and digital literacies, and networked learning

and has published and presented at international conferences on these subjects.



## Justin Sanders

Justin Sanders has spent nearly 20 years in a wide range of educational settings globally. In his current role as Senior Academic Program Manager for the Minerva Project, he works with partner organisations to build and implement some of the world's most innovative educational programmes based on the science of learning. Prior to joining Minerva, he served as Director of Continuing and Corporate Education at Temple University's Japan Campus, Global Recognition Manager and Research Manager for the International Baccalaureate (IB) in Singapore and Washington, DC, respectively, and worked with community

college leadership across the United States with the Association for Community College Trustees. Prior, he served as an education volunteer with the United States Peace Corps in Azerbaijan, contributing to improving educational infrastructure and capacity in a small rural community. Throughout his career, he has helped to organise dozens of local, national and international education conferences and events and has published research on internationalisation, secondary to tertiary transitions, and partnerships in higher education. He holds a BA Social and Behavioural Sciences from the University of Arizona, an MA in Education and Human Development from the George Washington University, and a PhD in Education from Osaka University, Japan, where his research explored approaches to international strategy development at universities in Asia.



## Tati D. Wardi

Tati Lathipatud Durriyah (Tati D. Wardi) is the Head of the Master of Education programme at the Universitas Islam Internasional Indonesia (UIII), Indonesia. She was a Fulbright recipient for her master's degree at Teachers College, Columbia University, and earned a PhD from the School of Education and Human Ecology from Ohio State University.

Her research interests revolve around literacy education in teacher education, specifically digital literacy, literature-based literacy education, and children's literature. Dr Wardi's article was

published in *Reading Horizons* and was included in the National Council of Teachers of English (NCTE)'s 2021 *Annotated Bibliography of Research in the Teaching of English* which is carefully curated by literacy luminaries. Tati has authored chapters on children's literature and student teachers' reading engagement in two books published by Rowman & Littlefield, United States.

**Special Seminar Presentation:**

**James W. McNally, Lowell Sheppard, Sela V. Panapasa**

# **Writing a Good Grant Application: Mastering Significance, Innovation, and Approach for Your Career**

**Wednesday, November 22, 2023 | 17:00-18:00 | Room 603 (6F)**

The ability to write, submit and administer research grants has become an increasingly 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 organisations representing potential funders can be summarised 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.

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. It will also involve reviewing how to identify funders who best reflect research interests, interacting with funding agencies, and ways to build funding networks. The critical elements for developing a successful grant application and effectively budgeting requested funds will also be discussed. This workshop will also offer time management tips for meeting deadlines and ensuring applicants have crossed all "t's" and dotted all "i's." While the rules, expectations, and procedures for grant applications will vary internationally, organisationally, 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.



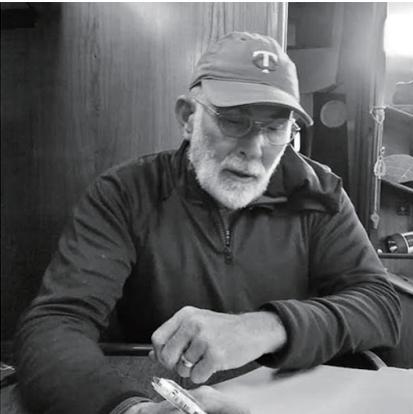
## **James W. McNally**

Dr McNally is the director of the NACDA Program on Aging, a research programme funded by the US National Institutes of Health for almost 50 years. During his career, Dr McNally has routinely written multi-million dollar research applications. Consistently funded by agencies, including NIH, NSF, the MacArthur Foundation, and the American Association of Retired Persons (AARP), he mentors graduate students and junior faculty in developing and maintaining a grant portfolio. Dr McNally is a Senior Research Scientist at the University of Michigan's Institute for Social Research, a world-renowned organisation recognized for its leadership in survey development and independently funded research.



## Sela V. Panapasa

Sela V. Panapasa studies family support and intergenerational exchanges among aged Pacific Islanders living in the US and Pacific region. Her work examines changes in elderly living arrangements and headship status in response to demographic and socioeconomic change. Her interests include family demography, race and ethnicity, measuring health disparities and comparative studies.



## Lowell Sheppard

Lowell Sheppard is an author, speaker, social entrepreneur, former minister, Fellow of the Royal Geographic Society, husband, father, long-distance cyclist, and aspiring sailor. Lowell has spent his entire adult life working with established non-government organisations (also known as non-profit societies) and in several NGO start-ups. As founder of HOPE International Development Agency Japan, Lowell has seen the growth of HOPE-JP to be in the top 2% of charitable organisations in Japan with the coveted *nintei* certified tax-deductible status.

Lowell has served for the last twenty years as an informal advisor to companies and boards in the area of ethical decision making and thought leadership with a focus on community legacy. He has dedicated much of his life to social and environmental improvement projects.

As an author, his book *Never Too Late* (Lion Hudson PLC, 2005) was published in four languages and was the catalyst for his latest social enterprise called the Never Too Late Academy. His latest book, *Dare to Dream*, is being published in November 2023 in the UK and next spring in the US.

Lowell moved onto a sailboat two years ago in Tokyo and is currently sailing full time around Japan, working as a digital nomad running small companies.



# ASIAN UNDERGRADUATE RESEARCH SYMPOSIUM (AURS)

## Overview

The two-day-long Asian Undergraduate Research Symposium (AURS) gives participants the opportunity to join other engaged undergraduate students from across the globe in an international and interdisciplinary course that aims to enhance their oral communication skills through a series of challenging and exciting online seminars and activities.

Students have the opportunity to present their research projects to a group of keen and like-minded peers, academics, and professionals. Students learn from their feedback and advice and in turn, develop their presentation skills, broaden your professional network, and forge new friendships.

We invite you to join us! Come and support the next generation of scholars with your presence and attention, with your great questions and guidance.

See you at the AURS Poster session!

## Symposium Schedule | Thursday, November 23

- 14:00-14:20 Student participant check-in
- 14:20-14:30 Welcome from the IAFOR CEO & Chairman
- 14:30-15:00 Final briefing session
- 15:00-15:55 Poster set up and practice
- 15:55-16:15 Break
- 16:15-17:45 Poster Presentation session in Room 701 (7F)
- 17:45-17:55 Concluding remarks and closing of AURS11

# Special Seminar Presentation: Grant Black An Introduction to the Asian Undergraduate Research Symposium

Wednesday, November 22, 2023 | 17:00-18:00 | Room 604 (6F)

First held in Kobe, Japan, in 2015, the Asian Undergraduate Research Symposium (AURS) gives participants the opportunity to join other engaged undergraduate students from across the globe in an international and interdisciplinary course that aims to enhance their oral communication skills through a series of challenging and exciting online seminars and activities.

Participants learn from their feedback and advice and in turn, develop your presentation skills, broaden their professional network, and forge new friendships.

Join this special information session to find out about AURS and how your students can get involved in future events.

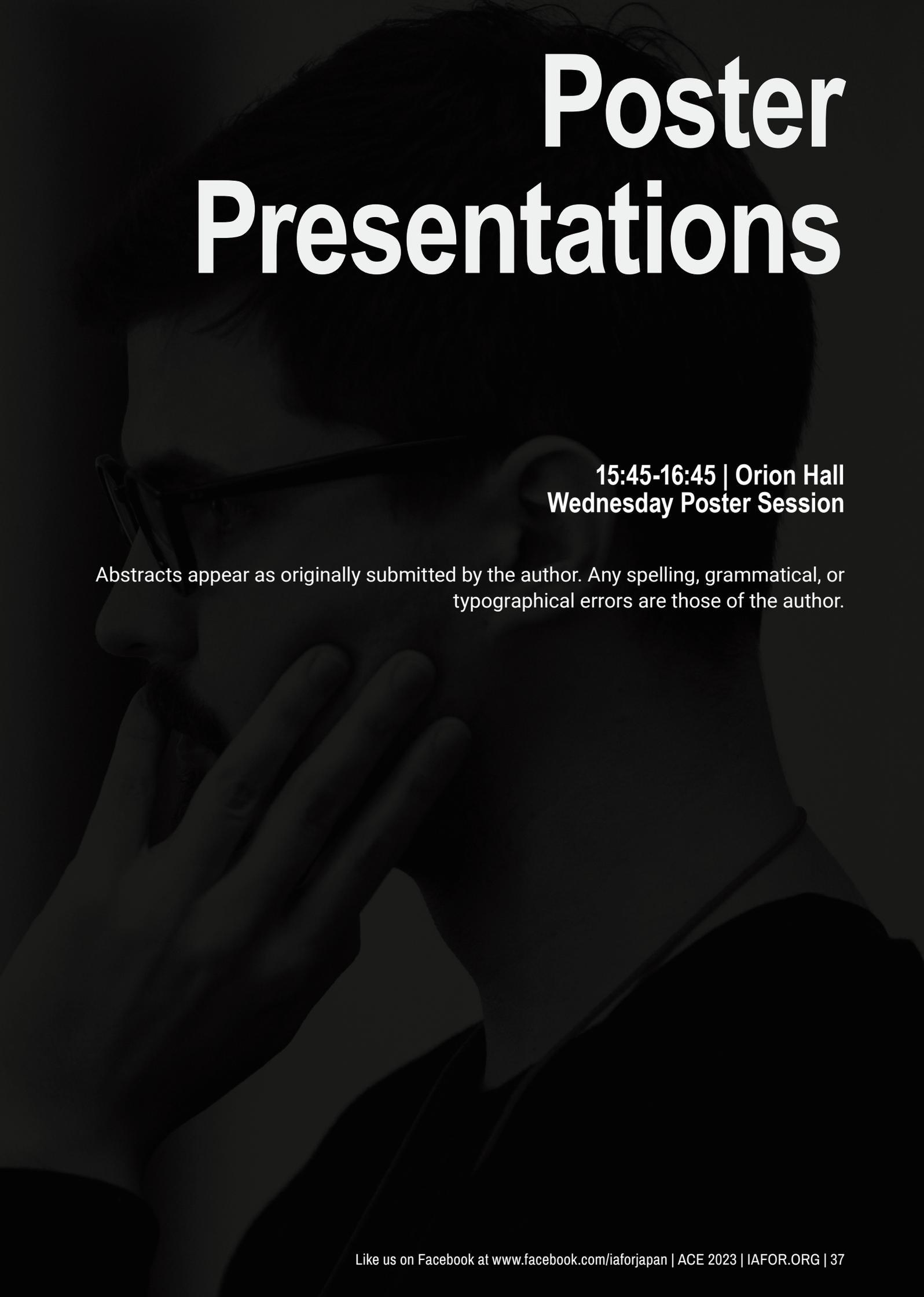


## Grant Black

Dr Grant Black is a professor in the Faculty of Commerce at Chuo University, Tokyo, Japan, where he has taught Global Skills and Global Issues since 2013. Grant is engaged in diverse roles as a global manager, systems builder, executive leader, and university professor. His research and teaching areas include global management skills, intercultural intelligence (CQ), and organisational management. He also has taught Japanese Management Theory at J. F. Oberlin University (Japan), and a continuing education course in the Foundations of Japanese Zen Buddhism at Temple University Japan. Previously, he was Chair of the English Section at the Center for Education of Global

Communication at the University of Tsukuba, where he served in a six-year post in the Faculty of Humanities and Social Sciences. He holds a BA Highest Honors in Religious Studies from the University of California, Santa Barbara; an MA in Japanese Buddhist Studies from the University of California, Los Angeles; and a Doctor of Social Science (DSocSci) from the Department of Management in the School of Business at the University of Leicester. Dr Black is a Chartered Manager (CMgr), the highest status that can be achieved in the management profession in the UK. In 2018, he was elected a Fellow of the Chartered Management Institute (FCMI) and a Fellow of the Royal Society of Arts (FRSA). Grant is President of Black Inc. Consulting (Japan), a Tokyo-based firm specialising in international and intercultural project management, communication projects, and executive leadership and training. He is the director of the Nippon Academic Management Institute (NAMI) and the author of *Education Reform Policy at a Japanese Super Global University: Policy Translation, Migration and Mutation* (Routledge, 2022). He serves as a Vice-President for the International Academic Forum (IAFOR).





# Poster Presentations

**15:45-16:45 | Orion Hall  
Wednesday Poster Session**

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

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

### Challenging & Preserving: Culture, Inter/Multiculturalism & Language

75728 | *Cultivating Insight and Respect: Developing a Culturally Responsive Curriculum Based on Paiwan Indigenous Wisdom in Taiwan*  
Hui Min Chou, National Academy for Educational Research, Taiwan

In the pursuit of honoring the ethos of the Education Act for Indigenous Peoples, which aims to foster mutual understanding and respect among diverse cultural collectives, this study embarks on a thorough exploration of indigenous knowledge. The intention is to metamorphose this knowledge into scholastic curricula and educational resources. Our aspiration, by grounding ourselves in the wealth of Paiwan cultural wisdom, is to architect a culturally reflective curriculum and pedagogy that enhances students' insight into and admiration for indigenous heritage. Over the initial two years, our quest is to form a conceptual framework of Paiwan traditional knowledge. In the subsequent year, this systematic knowledge will be matured and the curriculum and pedagogy will be suitably metamorphosed to cultivate a culturally reflective curriculum, ready to be actualized within indigenous high schools. This study delves into the quintessence and distinctiveness of indigenous knowledge system, scrutinizing its marginalization within infrastructures dictated by unequal power dynamics. It brings to light the confines of conventional indigenous cultural investigations, such as the Othering of indigenous communities and the fragmentation and discontinuity of indigenous knowledge, shortcomings that fail to genuinely apprehend its integrity and worth. This account is an assemblage of our mid-term findings, born out of literary scrutiny and field dialogue. We have tentatively identified three strata within the Paiwan knowledge structure, with a more exhaustive framework slated for fulfillment in the latter part of the year.

### Curriculum Design & Development

74934 | *Exploring the Influence of STEAM Instructional Sequences on Student Learning*  
Meng-Fei Cheng, National Changhua University of Education, Taiwan  
Yi-Ching Liang, National Changhua University of Education, Taiwan

This study addresses the lack of comprehensive discussion on the ways of integrating art into STEM (Science, Technology, Engineering, and Mathematics) curricula by designing a STEAM curriculum with a focus on electrically conductive clay. Two instructional sequences are compared: the STEM group, where STEM concepts are taught first, and the art group, where art is taught before integrating STEM. 113 middle and high school students in Taiwan participated, with data collected through pre- and post-tests on electric circuit science concepts, pre- and post-surveys on students' attitudes and learning attitudes towards STEAM, and the evaluation of design diagrams and the clay nightlight products. Due to the ordinal scale of the assessment and the non-normal distribution of the samples, non-parametric statistics are employed to examine whether there are significant enhancements of students' learning and differences between the two groups. Results show both groups improved scientific concepts and attitudes toward STEAM. However, the art group specifically showed significant improvement in their attitude toward the influence of art on STEM. The correlation between scientific concept improvement and attitude enhancement differed between groups, indicating starting with art for students who have better attitudes towards art may focus on art design but potentially neglecting the learning of scientific concepts. The STEM group demonstrated higher product creativity scores. These findings contribute to the understanding of effective teaching methodologies for STEAM, particularly enhancing scientific concepts, learning attitudes, and creativity, thereby providing valuable insights for future curriculum design.

75825 | *Research on the Training Mode of Indoor Design Majors Based on the Integration of Industry and Education*  
Yue Jun Zhao, Jiangsu Second Normal University, China  
Jia Yang Ma, Nanjing Forestry University, China

In China, the integration of industry and education refers to the close integration, mutual support, and mutual promotion of industrial practice and school education emphasized by schools in accordance with the needs of their students. It is a significant initiative to adapt applied majors to social and economic development, realize high-quality teaching, and enhance the comprehensive strength of students. Given the needs of the interior design profession, the following four aspects were analyzed and elaborated: the optimization of the progressive school-enterprise cooperation design talent cultivation mode and the "subject system" professional course structure; the dual-mentor system of school-enterprise cooperation and dual-teacher training in parallel with the construction of teaching teams; the construction of an interactive digital professional teaching platform and shared resource library; and the construction of a whole-process professional ability and vocational quality assessment and evaluation system with participation by mentors from schools and enterprises. This study attempted to develop an effective study path for indoor design majors to deeply implement the integration of industry and education and efficiently change the talent cultivation mode, and to help indoor design majors to improve the quality of talent cultivation in the practice of integrating industry and education.

### Design, Implementation & Assessment of Innovative Technologies in Education

75985 | *Development of a Java Source Code Analyzer for Learning Support that Runs in a Web Browser*  
Tatsuyuki Takano, Kanto Gakuin University, Japan  
Takashi Kohama, Tokyo Denki University, Japan  
Osamu Miyakawa, Tokyo Denki University, Japan

In computer programming education, students learn by doing various source code writing exercises. Students make various mistakes in the process of practicing computer programming. For this reason, we have developed a source code analyzer, which evaluates the source code submitted by students from compilation to execution on a teacher's PC. The tool can identify misspellings in the method names of source code and can judge the compiling and execution results. However, because the tool was developed to run on a teacher's PC, it does not easily fit into the format of general programming learning sites. The use of a programming learning site is advantageous in that it allows students to learn programming without having to build a programming environment. However, programming languages other than those that run in the client browser, such as JavaScript, must be compiled and evaluated on the server side, placing a heavy burden on the server side of the programming learning site. Therefore, we decided to use a method of running the developed tools on the client side by using a Java Virtual Machine that runs as JavaScript in the browser. As a result, we confirmed that the basic functionality of the tool runs on the browser and outputs evaluation results. The basic functionality of the tool outputs the results of spelling errors in class names and method names, coding style, compilation results, and execution results for source code written in Java.

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

### 75780 | *Applying the DT-CDIO Engineering Design Model in a Flipped Learning Programming Course*

Po-Sheng Chiu, National Chiayi University, Taiwan  
Hua-Xu Zhong, National Cheng Kung University, Taiwan  
Chih-Yu Hou, National Chiayi University, Taiwan

Current DT pedagogy is not appropriate for attracting STEAM talents and developing computational thinking ability. This study was designed to develop students' learning achievement and computational thinking abilities by using a Design Thinking (DT) - Conceive-Design-Implement-Operate (CDIO) engineering design framework in a flipped web programming course. The participants were 41 students (males=17, females=24) coming from a Taiwan University. All of the students (20–21 years old) had e-learning-related backgrounds in a teacher's college. The experiment was conducted for 14 weeks. The flipped learning and flipped DT-CDIO course each had a total teaching time of 6 weeks, and the midterm exam and final exam each took one week. We used a questionnaire and formative assessment to examine the students' computational thinking ability and learning achievement before and after the course was applied. The results showed the students significantly improved their learning achievement and computational thinking ability. There were no significant gender differences in learning achievement. Some gender differences could be seen in some dimensions of CT ability. This study shows that the DT-CDIO framework brings many benefits to promote interdisciplinary learning by attracting STEAM talent and providing evidence to support the importance of flipped web programming courses.

### 76076 | *Development of an Automatic Multiple Choice Question Generation System to Promote Understanding of Programming Concepts*

Yoshiki Sugihara, Tokyo Denki University, Japan  
Tatsuyuki Takano, Kanto Gakuin University, Japan  
Takashi Kohama, Tokyo Denki University, Japan  
Osamu Miyakawa, Tokyo Denki University, Japan

Gagné, a learning psychologist, defined four hierarchical elements of learning skills: problem-solving, rules, concepts, and discriminations. These intellectual skills form a hierarchical structure with problem-solving at the top, followed by rules, concepts, and discriminations. Mastering lower-order skills is essential for higher-order skill acquisition. We apply this theory to programming education. In programming education, students are sometimes given questions that require them to use a programming language to implement an algorithm or create a program that satisfies a certain specification. Such questions belong to the problem-solving type in the Gagné classification. Problem-solving is at the top of the hierarchy and may be difficult for beginning students to solve from the beginning. Ideally, students should start with simpler problems and progress to more complex ones as their understanding deepens. Programming is based on fundamental "concepts" like variables and methods, and "rules" such as syntax for transforming class diagrams into source code. These two skills are the lower level and are important for mastering programming skills. Hence, we have developed an automated system that generates problems promoting a step-by-step understanding of these concepts. The system marks programming concepts such as variables and methods, and outputs multiple-choice questions in PDF format that require the user to select the option that matches the specified concept. The system generated questions for approximately fifty study items that the authors defined. The system's output was improved by reviewing the problem and incorporating the feedback.

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

### 73837 | *Parents' Modelling of Play Skills in Spontaneous Interactions May Promote Autistic Children's Play Behaviours*

Ho Wai Lam, The Chinese University of Hong Kong, Hong Kong  
Wing Wun Law, The Chinese University of Hong Kong, Hong Kong  
Wing Chee So, The Chinese University of Hong Kong, Hong Kong

Background: Children on the autism spectrum always encounter difficulties in engaging in various play acts. Their parents can play a critical role in their play development. Among the different strategies adopted by parents, modelling, which involves parents demonstrating play acts to their children, can help the latter to develop play skills through observation and imitation. However, very little is known about whether modelling during parent-child spontaneous interactions facilitates the production of play acts in autistic children, in comparison to other strategies, such as suggestion, command, and imitation. The present study addresses this issue, and we hypothesize that parents' modelling of play behaviours would facilitate autistic children's production of play acts. Method: Thirty-seven autistic children aged between 73 and 114 months from a special school in Hong Kong and their parents were recruited for this study. The parents were instructed to play freely with their children for 20 minutes. The sessions were videotaped and coded. The children's play acts were categorized into sensory, relational, functional, and symbolic play, while the parents' play strategies were categorized into modelling, command, suggestion, and imitation. Results: The autistic children mainly performed sensory and functional play, while their parents adopted suggestion and command strategies. The parents' modelling strategy was significantly and positively associated with the number of their children's play acts. Conclusion: The modelling of play acts by the parents of autistic children is effective in promoting their children's play behaviours. It is advisable for parents to demonstrate play activities in daily-life interactions.

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

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

73618 | *Learning of Glutinous Rice Community Achieves Sustainable Development Goals (SDGs) in Sakon Nakhon Province, Thailand*  
Patcha Sattaka, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Thailand  
Kunwadee Kaewka, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Thailand  
Mayoonkarn Dechkunchorn, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Thailand  
Phinyarat Kongprakhon, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Thailand  
Arissara Phosanam, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Thailand  
Sukontip Vianmana, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus, Thailand

The production and consumption of glutinous rice have been a vital part of the local culture and daily lives of the farmers in the Great Mekong sub-region. Despite the economic, social, and environmental changes, the production of glutinous rice provides food security to rural farmers and consumers. This research aims to present the learning process to develop farmer performance and community enterprise towards food security, family and community security, and biological and cultural assets. The researchers used Participatory Action Research Methodology among 93 members of Organic Glutinous Rice Seed Community Enterprises and Na Yor Community Enterprise. The research approach involved the principal participation of the stakeholders, including observation, community preparation, lesson learning, knowledge transfer, experimentation, follow-up, and appraisal. The researchers used production standards as mechanisms for development toward SDGs. The study found that a deliberate process eventually brought about an increase in revenue of 19% per month for selling rice seed and processing products. The community enterprises got the certification of organic rice production standards and food safety standards for local wisdom glutinous rice production. The researchers discovered more than 30 indigenous glutinous rice varieties in the community and isolated them for future use. We still have the project impact on environmentally friendly production that can reduce the carbon-free more than 10 kg.CO2e, highlighted the importance of inherited wisdom for learning, and strong networks among government and private sectors. Now the community enterprise is the learning center for other communities and change to be SDGs Localization learning area of Thailand.

75440 | *Accumulation and Exchange of Social Capital: Teenage Gamers Among Their Families, School and Game World*  
YuPei Chang, National Yung Ming Chiao Tung University, Taiwan

In the contemporary gaming generation, digital games have become a dilemma between education and entertainment. Adolescents utilize digital games for socializing and amusement, but this has also sparked concerns among parents, teachers, and society about potential addiction. The purpose of this study is to explore how teenage players accumulate and transform social capital through game playing within the contexts of their family, school, and the gaming world. This article is built upon ethnographic research methodology and involves participatory observation and in-depth interviews conducted at a local elementary school. The field observation took place in the sixth-grade classroom over a period of six months, with a primary focus on observing interactions among classmates. During the field observation process, we conducted a census of nearly 200 students in the school, selecting 20 heavy players (14 boys and 6 girls). The subjects of the in-depth interviews were these 20 heavy players and their primary teachers. The study reveals three key findings. Firstly, the social network relationships of teenage players are interwoven among school, family, and the game world. They are overlapping and intertwining. Secondly, the norms within these social networks frequently clash with each other, and players must endure pressures from school and family to attain gaming enjoyment. Thirdly, resources such as time and money are exchanged and accumulated between the real world and the game world. Players have learned to convert real-life currency into virtual resources within the game world, such as powerful weapons, attractive outfits, and interactive emoticons that enhance their capabilities.

75458 | *A Study of the Termination of Undergraduate Students Status in the Faculty of Science and Technology, Thammasat University, Thailand*

Sirichan Vesarachasart, Thammasat University, Thailand  
Roumporn Sittimongkol, Thammasat University, Thailand  
Patarawan Sangnawakij, Thammasat University, Thailand

The objectives of this research were to study the survival function, median survival time, and hazard function of the termination of undergraduate students in the Faculty of Science and Technology, Thammasat University, Thailand. And to compare the survival time of termination of student status classified by curriculum, gender and domicile. Secondary data of 624 students were collected by the office of Registrar, Thammasat University. The research results showed that the undergraduate students of the Faculty of Science and Technology had the highest risk of termination of student status equal to 0.18 in the second semester of the 1st Year and the median survival time could not be determined because there were no cases where half of the students lost their status during the study period. When comparing the survival time of termination of student status Classified by curriculum, gender and domicile. It will be found that students in each curriculum was a significant difference in the survival time of termination of student status (P-value = 0.005). Male and female students had no difference in survival time of termination of student status (P-value = 0.393) and students residing in Bangkok and other provinces was a significant difference in the survival time of termination of student status (P-value = 0.034).

75327 | *The Influence of Job Demands on Rural Teachers' Engagement in Taiwan*

Yu-Zhen Huang, National Tsing Hua University, Taiwan

Under the circumstance of lower birth rate and higher turnover rates of elementary teachers in rural areas, this research aimed to investigate a relationship between job demands and elementary teachers' engagement in a rural area in Taiwan. We adopted a semi-structured interview method and a literature review to explore the influence of job demands on the engagement of elementary teachers in rural areas in Taiwan. We recruited seven elementary teachers in rural areas through the Dcard platform for online interviews. After interviews, these data were transcribed into codes and sentences and subsequently supported by literature reviews. The results showed that elementary teachers in rural areas suffered from the high workload of administrative tasks and a lack of special education resources, which are obstructive requirements faced by rural teachers in Taiwan, contributing to their higher turnover rates. Conversely, optimistic personality and a harmonious atmosphere play crucial roles in determining the job engagement of teachers in these areas. Overall, if rural teachers in elementary schools in Taiwan face higher job demands and limited resources, they will lower their willingness to stay in their positions. Therefore, we will focus on creating more enjoyable, harmonious, and comprehensive content in courses to retain these teachers effectively in the future.

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

75197 | *Research on the Perception of the Meaning of Work Among Teachers in Remote Areas of Taiwan*  
Liu Yi-Chen, National Tsing Hua University, Taiwan

Rural schools in Taiwan face challenges with teacher shortages, recruitment difficulties, and high turnover rates. Addressing teacher turnover and improving rural education's quality is a crucial issue. This study aims to explore teachers' perception of work meaning in rural education to reduce teacher turnover and enhance educational quality. The study utilizes semi-structured interviews to investigate rural teachers' work meaning perception. Purposive sampling was employed to select seven teachers from rural schools in Taiwan. Their experiences and narratives regarding work significance in rural areas were collected. The study explores three dimensions of work meaning among rural teachers: positive meaning in work, meaning-making through work, and greater good motivations, and their impact on enthusiasm for education and job engagement. The result of the study finds the following: 1. The perception of work meaning significantly affects teacher retention in rural schools. 2. Positive meaning in work, meaning-making through work, and greater good motivations among rural teachers positively influence enthusiasm for education and job engagement. 3. Unique experiences of teachers in rural service, along with close relationships with students, parents, and the local community, and a sense of local identity, strengthen teachers' sense of responsibility and work meaning perception. This, in turn, reinforces their job engagement and willingness to remain in rural placements.

### **Educational Policy, Leadership, Management & Administration**

73843 | *The High School's Image – Is It Important for Attracting the Best Teachers*

Zoran Krupka, University of Zagreb, Croatia

Goran Vlastic, University of Zagreb, Croatia

Jurica Pavicic, University of Zagreb, Croatia

Kosjenka Dumancic, University of Zagreb, Croatia

Corporate Image (CI) can be defined as a concept that comprises physical and non-physical attributes of the company interpreted by its stakeholders. It is a valuable asset for all subjects in the market arena, especially today when companies need to differentiate themselves from the competition. For profit-oriented companies, a strong and positive CI usually means bigger sales and market shares, loyal consumers, higher profit margins, and increased customer engagement. For high schools, CI represents one of the key factors in attracting and engaging different kinds of stakeholders – pupils' willingness to apply for the program, teachers' desire to become an employee, sponsors for making donations, etc., and therefore has a direct influence on high schools' success. The focus of this paper will be on teachers as one of the most important high school stakeholders. We hypothesize that high school's CI is an essential factor in attracting the best teachers and that it influences their satisfaction and loyalty. Finally, we will discuss the importance of marketing activities in creating a positive CI of high schools and its antecedents.

75750 | *Departments of Medical Education: Models and Structure*

Nicole Borges, Geisel School of Medicine at Dartmouth, United States

Departments of Medical Education world-wide have a variety of structures and functions. Each department is organized to meet a specific mission (i.e., teaching, biomedical research, medical education research, service) resulting in similarities and differences across them. This presentation will describe several models of departments world-wide and will compare and contrast with the Department of Medical Education at Geisel School of Medicine at Dartmouth in the United States. Information on Creation/Rationale for Department of Medical Education; Funding; Structure; Organization/Reporting; Challenges; Distinction from Foundational/Basic Science Departments; Interface with Office of Medical Education and Educator Academy will be addressed.

75753 | *Mapping Leadership Strategies for Effective Blended Learning in Hong Kong Schools: An Analysis through the CABLS Framework*

Ka Man Lau, The Chinese University of Hong Kong, Hong Kong

Paul Lam, The Chinese University of Hong Kong, Hong Kong

This study explores effective implementation and leadership strategies of blended learning in Hong Kong schools, framed through the lens of the Complex Adaptive Blended Learning System (CABLS) framework (Wang et al., 2015). Fifteen school leaders were purposively selected from schools dedicated to blended learning for at least two years. These leaders also had a minimum of two years' prior service at their schools, ensuring comprehensive insights into their school's culture and the topic under study. The last sampling criterion is a high satisfaction rate towards blended learning among teachers and students in these schools. Data was collected through semi-structured interviews that were then transcribed and subjected to thematic analysis. The findings reveal that the strategies employed by these leaders can be effectively mapped against the six subsystems of the CABLS framework: the learner, the teacher, the technology, the content, the learning support, and the institution. For instance, the institution subsystem was targeted through a gradual approach to instructional change and the cultivation of a collaborative culture among teachers. The content subsystem was enriched by providing diverse and engaging learning materials (both online and offline), adapted to suit the evolving needs of the learners and the teachers. Overall, the study suggests that the CABLS framework provides a comprehensive and adaptive approach to effectively implement blended learning. In addition, the findings offer practical insights for school leaders aiming to implement or improve blended learning in their institutions.

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

75323 | *A Study on the Evaluation Benefit of School Evaluation in Taiwanese Senior High Schools*  
Tsai-Feng Cheng, National Kaohsiung Normal University, Taiwan

After years of implementation, Taiwan has invested a great deal of manpower and resources in the evaluation of senior high schools, but has the evaluation achieved the expected results? This issue deserves further exploration. Therefore, the purpose of this study is to conduct a questionnaire survey to understand whether high school educators perceive the benefit of school evaluation and to make an overall comparison with the results of a previous survey (2015). The research tool utilized in this study is the "Indicators of Evaluation-Benefit for Senior High Schools," developed by the researcher, employing a six-point Likert scale. The evaluation benefit is divided into two dimensions: school management and academic development. Within school management, it further examines administrative effectiveness, resource integration, organizational interaction, and environmental improvement. For academic development, it assesses curriculum planning, teacher professionalism, and student performance abilities. According to the test results of SEM confirmatory factor analysis, the tool has a good fitness evaluation index and meets the model's intrinsic fitness test. The formal questionnaire samples include principals, directors, section chiefs and teachers, totalling 780 participants with 582 valid responses. The statistical methods used include descriptive statistics, one-way ANOVA, and t-tests. The main research findings are as follows: 1) The overall benefit of high school evaluation, school management, and academic development are all at a medium level, as are the eight subdimensions. 2) The highest-scoring subdimensions are administrative effectiveness in school management and the curriculum planning in academic development. 3) Educators from private and large schools have a higher perception of evaluation benefit. 4) The scores of evaluation benefit in this study are lower than those of the previous survey.

75397 | *A Study on Construction of Preschool Educators' Work Passion Scale*  
Yu-Yun Chou, National Tsing Hua University, Taiwan  
Liang-Chen Sun, National Tsing Hua University, Taiwan

Preschool educators play a significant role in educational settings from being responsible for the care and education of young children as well as providing support to students with special needs. Therefore, their passion and level of engagement have a direct impact on teaching. The present study aimed to construct a scale for measuring preschool educators' work passion and analyze the scale's reliability and validity. Firstly, the definition and essence of work passion were explored for the fundamental basis for scale construction. Based on the literature review, work passion consisted of three dimensions: "reaching full potential," "job commitment," and "job satisfaction." Subsequently, a sample of 300 preschool educators were randomly selected for the survey research. The item analysis indicated that the composite reliability values (CR) for all 19 items exceeded 3 as favorable item discrimination. Next, factor analysis was conducted on a single factor for examining factor loadings ranging from .48 to .83. Items with factor loadings below 0.5 were removed. To ascertain model fit, the confirmatory factor analysis (CFA) was conducted as the final step. The absolute fit indices, incremental fit indices, and parsimonious fit indices for the 19 items in this study all met the criteria for the acceptable fit. Hence, the preschool educators' work passion scale with 19 items constructed in this study indicated a considerable level of reliability and validity.

75923 | *The Teaching Reformation of Employment-Oriented in College Music Major*  
BoYan Fan, Mahidol University, Thailand  
Ni-on Tayrattanhcai, Mahidol University, Thailand

This research innovatively proposes to take employment as the training orientation of college of Music undergraduates, inversely deduces the teaching logic in undergraduate education from the perspective of employment goals, and puts practice in the same important position as major courses. Under the current social background, the vocational ability needs of college students should be deeply cultivated in the learning stage of colleges and universities. It is the function of the undergraduate education of the college of music to pay attention to the breadth and develop the depth of students' professional direction. This study will adopt the qualitative research method, and the main implementation methods include but are not limited to: 1. Semi-structured interview. The project group plans to invite 6-8 industry experts to participate in the interview. 2. Qualitative questionnaire. An online questionnaire was made and sent to 50 college of Music undergraduates to fill out. The contents focused on the employment intention and expected teaching and related services provided by the school in this regard. 3. Case studies. This research will present three employment cases of conservatory graduates, namely, employment in public schools after graduation, employment in ensembles performing groups and self-employment.

74727 | *Constructing the Scale of Transcendent Leadership for Junior High School Principals*  
Wei-Cheng Chien, National Academy for Educational Research, Taiwan  
Chuan-Chung Hsieh, National Tsing Hua University, Taiwan

In the rapidly changing global organizational environment of today's world, the theory of transcendent leadership has been highly inspiring. Although it has emerged for over a decade, there is currently no related scale available for academic use. Especially in recent years, junior high school principals have faced changing educational environments both within and outside the school, requiring them to possess transcendent leadership thinking and actions. Constructing the scale of transcendent leadership for junior high school principals would be beneficial for the academic research and development of principal leadership studies. Based on this premise, the present study constructs the scale of transcendent leadership by exploring junior high school principals' role positioning and actual practices in school leadership, drawing from the theory of transcendent leadership. The scale has revised through 5 expert reviews and used in a formal questionnaire survey with Taiwanese junior high school teachers as the research participants. A total of 1,580 valid questionnaires were collected. The results of this study establish a questionnaire consisting of 36 items for the junior high school principals' transcendent leadership scale, which can be categorized into four major dimensions and 12 sub-dimensions: 1. "Leadership of Self": Moral Manifestation, Self-awareness and Regulation, Self-spiritual Growth. 2. "Leadership of Others": Service Orientation, Motivation & Care, Facilitating Spiritual Growth. 3. "Leadership of Organization": Shared School Governance, Shaping Organizational Vision and Culture, Transcending Limitations. 4. "Leadership of Community": Establishing Community Network Relationships, Managing Social Responsibility, Inclusive Development.

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

### Educational Research, Development & Publishing

75472 | *A Cross-National Study of Mathematics Achievement via Three-Level Multilevel Models*

Youjin Lee, Hanyang University, South Korea

Yasuo Miyazaki, Virginia Polytechnic Institute and State University, United States

The present study explored the effects of the national and cultural contexts on students' mathematics achievement. The study also investigated the nature and magnitude of student-level (level 1), school-level (level 2), and country-level (level 3) factors that are associated with math achievement. The Program for International Student Assessment (PISA) 2018 datasets were used. The findings of HLM analysis showed that mathematics achievement is associated with national and cultural contexts since the study found 31.30% of the total variation was accounted for level 3 in math achievement. Also, the study found that various predictors were statistically significant for explaining math achievement. Moreover, the study found several counterintuitive association phenomena due to the shift of meaning. These findings were explained regarding practical and theoretical implications for policymakers, educators, and researchers to improve students' mathematics achievement.

75484 | *The Application of Dialogic Reading in Teaching Pre-schoolers: A Literature Review*

I Jung Chen, Independent Scholar, Taiwan

Pin-Jui Chen, Independent Scholar, Taiwan

In this era of information explosion, knowledge is power. Words and texts can be seen everywhere in our daily lives. Picture books refer to the media which combines illustrations and text. By applying shared reading techniques when reading picture books, children's interest in reading can be opened up. Dialogic reading is one of the reading techniques in which the reader engages in conversations with a child during the reading process (Barbour, 2006). This approach not only encourages active participation and enhances interaction skills in children during shared reading but also utilizes the content of the books as a medium for dialogue and interaction between adults and children to improve children's reading abilities. It emphasizes the concept of "child-centred" intervention, aiming to transform children into active storytellers through various techniques, such as listening, promoting, expanding, and responding to language (Whitehurst et al., 1988). This study encompasses domestic and international journals, utilizing databases, including Pubmed, Medline, and Airiti Library with a publication year range from 2013 to 2023. The search results yielded seven studies that applied dialogic reading training to children. We can see that these studies all employ the CROWD strategy as an intervention method to enhance children's interaction skills through dialogic reading. The participants primarily consist of children aged 3 to 6 years and 11 months, with no restrictions on their developmental status. In terms of the duration and frequency of interventions, most studies were designed for 30 minutes per session, twice a week, and lasted for several weeks.

74528 | *Predicting Appraisals of Achievement-Related-Emotions, Motivation, and Behaviour in Adolescent Students from the Perceived Demands and Resources of High-Stake Test Situations*

Tahrim Hussain, Liverpool John Moores University, United Kingdom

The research aims to investigate how the perceived-demands and resources of A-Level study predict achievement-related-emotions, motivations, and behaviours. The research question is- how perceived-demands and resources of A-Level study predict emotions of hopelessness, anxiety, pride, and anticipatory-relief; motivations of intrinsic and extrinsic goal-orientation and behaviours of planning, task-management, and persistence. The hypotheses are: 1) The perceived-demands of A-Level study will increase negative emotions of hopelessness and anxiety and an increase in extrinsic goal-orientation. 2) The perceived resources will increase positive emotions and behaviours of pride and anticipatory-relief, planning, time-management, persistence, and an increase in intrinsic goal-orientation in students. The sample comprised 963 sixth-form A-Level students aged 16-18 years old. Participants completed a self-report questionnaire that comprised the first of two waves. Data were analysed using a hierarchical regression in three blocks. Block-1 consisted of demographics: gender, ethnicity, free-school-meals and whether English was students first language. Block-2 consisted of prior-achievement data: GCSE Maths and English grades. Block-3 included demands and resources. Perceived-demand explained additional variance in achievement-related-emotions ( $R^2 = .01$  to  $.15$ ), motivations ( $R^2 = .02$  to  $.25$ ), and behaviours ( $R^2 = .01$  to  $.20$ ) after accounting for the variance explained by demographic-variables and prior-achievement. Perceived-resources explained additional variance in achievement-related-emotions ( $R^2 = .04$  to  $.01$ ), motivations ( $R^2 = .03$  to  $.17$ ), and behaviours ( $R^2 = .01$  to  $.19$ ). Specifically, perceived-demands predicted hopelessness ( $\beta = .44$ ), anxiety ( $\beta = .53$ ), pride ( $\beta = -.28$ ) and extrinsic goal-orientation ( $\beta = .16$ ). Perceived-resources predicted hopelessness ( $\beta = -.48$ ), anxiety ( $\beta = .31$ ), anticipatory-relief ( $\beta = .22$ ), pride ( $\beta = .56$ ), intrinsic goal-orientation ( $\beta = .31$ ), extrinsic goal-orientation ( $\beta = .45$ ), planning ( $\beta = .33$ ), time-management ( $\beta = .30$ ) and persistence ( $\beta = .45$ ).

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

### Foreign Languages Education & Applied Linguistics

73772 | *Syntactic Adaptation in Japanese EFL Learners and L1 English Speakers' Sentence Comprehension*

Mayo Hiura, Kyoto Institute of Technology, Japan

Hirokazu Yokokawa, Kobe University, Japan

Sentence comprehension contains a variety of information and factors, which creates ambiguity and be difficult to process. Few studies have yet investigated how syntactic structure adapts in sentence comprehension with EFL learners, especially not with foreign language learners whose syntactic structure differs significantly from that of English and Japanese, which clearly have a low amount of target language input (Kaan et al., 2019; Arai, 2016). The purpose of this study was to determine the processing mechanisms of Japanese EFL learners and L1 English speakers in sentence comprehension, and to determine whether repeated exposure of Japanese EFL learners facilitates implicit learning. Participants were exposed to reduced and unreduced relative clause sentences (e.g., The professor [who was] assisted in a difficult experiment enjoyed the task recently.) in the first session, and then randomly exposed to both reduced and unreduced relative clause sentences in session two. Consequently, the reading time became progressively longer with each experience of reading ambiguous sentences, but the higher percentage of correct responses to content comprehension questions suggests that syntactic processing is taking place. The latency of reading and the high percentage of correct responses from session 1 to session 2 also suggest that implicit learning occurred. Native English speakers also showed progressively longer reading times suggests that the reading time regions in this study were regions where participants had to reanalyze and where processing costs were high, and that implicit learning occurred, and syntactic processing was activated in these regions with each trial, resulting in longer reading times.

73979 | *Learning the Principles of Narrative Frames: A Pilot Study*

Reginald Gentry, University of Fukui, Japan

This study explored the strengths and weaknesses of using narrative frames when conducting qualitative research. The focus was on eliciting information regarding participants' (N = 11) beliefs as they entered a postgraduate program at a major university in Japan. The theoretical underpinnings of narrative frames are discussed, the specific narrative frame employed is introduced, lessons learned regarding the analytic approach are shared, and perceived strengths and weaknesses of using narrative frames are offered. As this was a pilot study, the focus was on the narrative frame itself. While the use of this narrative frame was useful for gathering data, it was found to be limiting in scope, and needs supplementation with other qualitative and quantitative data sources to reach its full potential as an investigative resource.

76084 | *Face-to-Face vs. Online Feedback Approaches and Comments in Academic Writing Courses*

Matthew Armstrong, Kyushu University, Japan

There are various ways in which teachers provide feedback in L2 academic writing courses. This has been especially true over the past four years during and after the pandemic. It has also been interesting to see how students have altered their own style of giving feedback. This research presents two dimensions—how the teacher has changed his approach to giving feedback during and post-covid. and key differences noted in students' comments in online and face-to-face contexts. The presenter first gives a visual flowchart of his approach to giving feedback in online and face-to-face contexts. Audience members will be encouraged to reflect on their own teaching environments to see which approach could possibly help to create a smoother feedback process. Secondly, the researcher will present data findings showing the differences in quantity and quality of student feedback between April 2022–April 2023 (online) and April 2022–August 2023 (face to face). Data from feedback collected from the face to face classroom is currently being analyzed, however initial findings show that students' online comments have more depth, especially in being critical about content and logic, as opposed to the face-to-face environment where students gave mostly surface comments on grammar, spelling, and writing structure. This key finding highlighted the important role affective factors play in the academic writing classroom when providing feedback. The researcher will further provide results showing the change in quantity and type of comments as well as linguistic tone when communicating online and face-to-face.

73937 | *Effects of Spoken Input on Syntactic Priming in the Language Production of Japanese EFL Learners*

Mayu Hamada, Kobe University, Japan

The occurrence of alignment at the syntactic level, the same structure tends to be repetitively used between interlocutors in the dialogue (syntactic priming), plays an important role in achieving the goals of communication (Pickering & Garrod, 2004). Previous studies proposed that priming occurs from an error-based implicit learning mechanism and is a consequence of adaptation to minimize the expected prediction error (Chang et al., 2000; Jaeger & Snider, 2013). However, these results indicate changes in the acquired syntactic knowledge of L1 speakers. Thus, how EFL learners learn incomplete knowledge and whether error-based learning is applicable to second language acquisition have not been explored. In this study, a picture description task with spoken primes and targets was conducted to investigate whether the spoken input affects Japanese EFL learners' syntactic priming. The participants comprised 31 undergraduate learners who were asked to describe 88 pictures after they heard the primes with passives or fillers (actives). The results show that the priming effect was observed, indicating that learners transited the knowledge of the structure from declarative to procedural knowledge when they heard spoken forms. The magnitude of the cumulative syntactic priming effect increased as learners were exposed to input showing the degree of formulation of syntactic representations changed with increased syntactic experience as the difference between prior predicted output and actually received input caused prediction errors. Therefore, the results indicate that Japanese EFL learners learned syntactic knowledge through an error-based learning process based on prediction errors as L1 speakers.

# 15:45-16:45 | Orion Hall

## Wednesday Poster Session

### Higher Education

75871 | *Research on Self-Concept and Altruistic Behavior of College Students Serving as Boyo Tutors*  
Hui-Ju Pai, Providence University, Taiwan  
Yu- Fei Chen, Da-Dun Elementary School, Taiwan

This study aims to investigate the impact of college students serving as remedial tutors for Boyo on their self-concept and altruistic behavior. Employing a qualitative research methodology, utilizing interviews, literature review, classroom observations, and document analysis, the study was conducted over a period of 16 weeks at one of Boyo's remedial tutoring locations, specifically Providence University. Through the exploration of the motivations, training processes, challenges encountered during participation, and strategies for self-adaptation of four Providence University students serving as teaching assistants, the study analyzes the influence of their practical actions on self-concept and altruistic behavior. The following conclusions are drawn: 1. The motivations of college students serving as teaching assistants are influenced by factors such as the convenience of the environment, family, teachers, exploration of future career paths, and economic considerations. 2. The experience of college students serving as teaching assistants influences their self-adaptation process. Feedback from students, classroom challenges, and personal growth experiences contribute to enhancing their altruistic behavior, self-reflective abilities, problem-solving skills, and self-overcoming. 3. During the teaching process as teaching assistants, college students feel the significance of their role through feedback from the assisted students. This leads to a reevaluation of their self-perception, attitudes, behaviors, and values, contributing to the strengthening of their self-concept.

71958 | *Analysis of Gender Difference of the Factors Affecting Academic Performance of Mathematics Doctoral Students*  
Xiaonan Han, University of Macau, China

This study aimed to investigate the gender differences in the factors affecting the academic performance of mathematics doctoral students. A total of 147 participants were surveyed using a questionnaire that included items such as fear of delay, doctoral student engagement, support from parents and teachers, facilitating conditions, stress levels, and well-being. This study aimed to investigate the impact of various factors on the academic performance of mathematics doctoral students and whether there were any gender differences in these factors. Structural equation modeling (SEM) and Multiple group analysis approach were adopted to analyze the questionnaire data. The results showed that the fear of being delayed did not have a significant impact on the academic performance of doctoral students in mathematics, but it did heighten their stress levels. The level of engagement of students had a positive impact on their academic performance, and teacher support had a significant impact on academic performance, particularly for male students. However, there were no significant gender differences in the factors affecting academic performance. These findings suggest the importance of creating a supportive environment and promoting student engagement to enhance academic performance. The study's findings also have practical implications for institutions, supervisors, and parents seeking to enhance the academic performance of different-gender doctoral students.

74845 | *A Pilot Study of Implementing a Stress Management and Resilience Training (SMART) Programme in Nursing Undergraduates: Quasi-experimental Approach*  
Sze Wing Julia Wong, Tung Wah College, Hong Kong

Resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress, such as family and relationship problems, serious health problems or workplace and financial stressors. It means "bouncing back" from difficult experiences and becoming stronger and wiser. The principal investigator of this study found that the counsellor conducted 65 counselling sessions for the nursing undergraduates in the academic year from 2018/2019 to 2020/2021. Forty-five percent of them were related to clinical issues and some of them had even quit the programme due to suffering from serious mental issues. Given that resilience is an ability which can be learned and developed in anyone, the aims of this study are to implement a pilot study on introducing a structured and scientifically proven method and based on Hong Kong's clinical context, namely a Stress Management and Resilience Training (SMART) programme to 40 nursing undergraduates before their clinical practicum. A quasi-experimental approach with three time points was used in this study. The Connor-Davidson Resilience Scale-10 and Perceived Stress Scale-10 were used to evaluate the participants' stress and resilience levels. Besides, an evaluation survey was employed to evaluate the participants' satisfaction upon completion of their training. The results showed that there was an insignificant change in stress level but significant improvement in resilience level. Thus, the results of the evaluation survey were very promising. To conclude, the SMART programme can boost their resilience level and its effect seems able to last for at least 3 months.

76000 | *The Impact of Socioeconomic Status on Higher Educational Attainment in Hanoi (Vietnam)*  
Tram Nguyen, VinUniversity, Vietnam  
Ngan Do, FPT University, Vietnam  
Phuong Nong, VinUniversity, Vietnam

This study investigates the intricate connections between financial circumstances and academic accomplishments in the realm of higher education, with a specific lens on Hanoi, Vietnam. By thoroughly examining how economic factors steer students' academic journeys, this research sheds light on the unique challenges and prospects prevalent within this regional context. Through an analysis of localized datasets, in-depth interviews, and case studies, this research seeks to uncover the intricate mechanisms through which financial status molds educational inequalities among higher education students in Hanoi. It examines how variations in income levels, parental educational backgrounds, and access to resources impact students' access to quality higher education, academic performance, and career prospects. Moreover, this research investigates the role of cultural and societal factors unique to Hanoi that intersect with socioeconomic status to influence educational outcomes. It aims to pinpoint the obstacles hindering underprivileged students from enrolling and excelling in higher education, and explores potential strategies to foster equity and leveled opportunities. Centered specifically on Hanoi's higher education landscape, this study aims to furnish tangible insights for local educational decision-makers, institutions, and stakeholders. Ultimately, its aspiration lies in contributing actionable insights for targeted measures that can bridge existing gaps and cultivate an academic environment where students of all backgrounds can flourish, thereby propelling sustainable advancement within both the educational framework and the wider community.

# 15:35-16:35 | Orion Hall

## Wednesday Poster Session

### International Education

76028 | *The Historical Logic of Academic Colonialism and Cultural Dependence in the Internationalization of Higher Education*  
Ruirui Wu, Beijing Foreign Studies University, China

In the globalization, multinational enterprises require many international mobile laborers. This process constantly undermines national and ethnic consciousness, weakens national and civic education, and to some extent, leads to the hollowing out of national consciousness in developing countries. We should be vigilant against the West-centered internationalization of higher education. We should consider the fact that internationalization of higher education has a certain degree of permeability, especially when higher education institutions with academic power interfere, oppress, and assimilate those in weaker academic positions, which fosters academic colonialism. Although internationalization of higher education can promote academic exchanges, knowledge sharing, skill dissemination, and mutual understanding and integration of cultures between countries' higher education institutions, Western cultural hegemony and academic colonialism can also bring the danger of cultural decline or even extinction to developing countries, leaving them in a state of being "internationalized."

73322 | *Paths for the Promotion of a Culture of Peace in Latin American Schools: From Popular Education and Education in the 21st Century*

Elison Davi Crispim Ramos, Government of the State of Pernambuco and City Hall of Ipojuca, Brazil  
Leandro Ribeiro Gomes de Lima, Municipal Government of Gameleira, Brazil  
Fernanda Márcia Costa Silva Souza, Municipal Government of Gameleira, Brazil  
Marcus Vinicius da Silva, Government of the State of Pernambuco, Brazil

In this study, we will present a global historical and social discussion about the school in the 21st century, in the Latin American context, aiming to promote a culture of peace in public schools in the countries. It is a research with a contemporary bias where the authors present possible actions to promote a culture of peace in educational institutions, proposed through pedagogical paths and administrative actions that can be followed by any educational unit, based on the performance of different actors educational, such as teachers, students, local community, management team, among others; aiming to promote a positive institutional climate, Education for non-violence and the activation of collegiate bodies that are socially represented in the school environment. We conclude that lifelong education, with pathways for training in multiple dimensions of the student, on Popular Education and the development of education in the 21st century according to UNESCO premises. Considering the difficult times we are going through, where the cultivation of feelings of hatred, intolerance and discrimination has scared society and also schools, it becomes even more urgent that we deepen the study and reflection about the implementation of the Culture of Peace in the School Spaces. We will be based on studies carried out in countries such as Argentina, Brazil, Chile and Mexico. Collective action in promoting a culture of school peace supports institutional success, respecting, in these contexts, the specificities of each institution.

72795 | *Popular Education: A Latin American Educational Conception*

Natália Antonia da Silva Ramos, Secretaria Municipal De Educação, Brazil  
Onilda Patricia de Sousa Belo, Government of the State of Pernambuco / Government of Barreiros Pernambuco, Brazil  
Carlos Arthur Soares de Avelar Júnior, Government of Barreiros Pernambuco, Brazil

This study aims to explain about Popular Education in a Latin American educational conception and, from the historical landmarks and academic publications, make a connection between the history of Popular Education in Latin America, social movements, social subjects, the curriculum and the role of the contemporary popular educator. Among the specific objectives we have to understand Popular Education in a historical and cultural context; Recognize the capitalist, neoliberal influence on Popular Education, in the struggle of social movements and accept the importance of popular subjects in promoting Popular Education with quality and equity; The methodological procedure used in this research was a literature review and literary refinement, which were based on concepts from the works of Jara (2020), Pontual and Ireland (2006), Gadotti and Torres (2003), Freire (1987), Narita and Kata (2020), Carvalho, Ramalho e Santos (2019), Brutscher (2021), among others who address Popular Education in the historical-social context and its importance for social transformation to break heterogeneity. This work denotes a qualitative study, using a bibliographic research, document analysis and constant data mining in articles and books. We also aim to understand Popular Education from the work of Paulo Freire, Pedagogy of the Oppressed (1987), the National Common Curricular Base and its relationship with the integral formation of the student in the educational and social context and the social movements from the profile of the educator linked to Popular Education, in the bias towards existing challenges such as infrastructure, training processes and didactic resources.

### Learning Experiences, Student Learning & Learner Diversity

75244 | *Self-regulated Learning and English Language Learning Strategies for Secondary School Students*  
Julie Junaščíková, Tomas Bata University in Zlín, Czech Republic

Self-regulated learning (SRL) works with the individual's ability to control their learning process, which includes, among other things, setting goals, choosing appropriate learning strategies that are important for fulfilling the set goals, and achieving the desired academic success. The aim is to analyse whether the level of SRL and Learning language strategy (LLS) of secondary school students differ from each other according to their level of knowledge of the English language in the Czech Republic. The research focuses on comparing regions with the best and worst results of secondary school pupils in the context of the English language. Another goal of the research is to verify whether SRL in better-rated regions is a more significant predictor of LLS than in worse-rated regions. The research sample consisted of 1307 secondary school students. Data were collected using DAUS, SILL, and a constructed didactic test for secondary school pupils. The findings indicate fascinating results, where no difference was noted in SRL or LLS, both in the regions with the best and worst results of secondary school students in the context of the English language. As evidenced by the coefficients of determination reaching almost 22% of the variance (regions with the best results) and almost 20% of the variance (regions with the worst results), LLS can be explained by SRL. Based on the standardized regression coefficient of 0.464 (regions with the best results) and 0.442 (regions with the worst results), SRL can be expected to be a fairly strong predictor of LLS.

# 15:35-16:35 | Orion Hall

## Wednesday Poster Session

75284 | *Exploring the Undergraduate Students' Understandings of Nature of Science in Taiwan*  
Shu-Sheng Lin, National Chiayi University, Taiwan

Understanding the nature of science has always been one of the indicators used in the scientific education to assess whether a student possesses scientific literacy. The purpose of this plan was to survey the university students' understandings of nature of science in the context of nano-technology in Taiwan. The study utilized online convenient sampling to recruit undergraduate students from universities located in the southern part of Taiwan. The NOS questionnaire comprises four consensus aspects of NOS: Imagery and creativity in science, the tentative knowledge in science, the limitation of evidence, and multiple interpretation of evidence. The results indicated that non-science (NS) majors scored significantly higher than science(S) majors in imagery and creativity in science. On the other hand, S majors had significantly scores than NS majors in multiple interpretation of evidence. There were no significant differences in tentative knowledge in science, and the limitation of evidence between the two majors. As for qualitative data, NS majors tended to mention that the scientists usually apply imagination and creativity in inquiry process to develop new theories, methods and products. S majors inclined to point out that scientists can interpret the same results and evidence from different perspectives. The implications for NOS instruction and curriculum design were discussed.

75163 | *A Study on the Piano Teaching Model of Higher Vocational College with CIPP Evaluation Model*  
Qian Wang, Mahidol University School of Music, Thailand

This study used the CIPP evaluation model to evaluate the piano learning effect of students majoring in preschool education in a typical higher vocational college in Northwest China, in order to study the important factors affecting students' piano learning and to develop a new model of piano teaching in higher vocational colleges. This study used qualitative research methods to investigate 60 students in a second-year experimental class of preschool education majors in a restructured institution for two consecutive semesters (one academic year). The research methods included the historical documentation method, the observation method, and the semi-structured interview method (six students were randomly selected for the interview and observation of classroom behaviors), and a standardized test was designed to examine the learning outcomes of the students utilizing the new teaching model. The study found that students majoring in preschool education in higher vocational colleges have a poor foundation in music learning, that the connection between piano learning and students' future career plans is not clear enough, and that the teaching content is too general, which is the main factors affecting the effectiveness of piano teaching for students. Therefore, the researcher used this as a basis for adapting the existing syllabus and proposing a new teaching model more suitable for students' piano learning in this kind of college, including the piano course. This includes the piano program. The researcher hopes that the results of this study will help to promote the development of piano education in higher education institutions.

73777 | *The Power of Visuals: The Significance of Higher Education Teacher Professional Development in Visual Literacy in Kuwait*  
Alaa Zeyab, Public Authority for Applied Education and Training- Collage of Basic Education in Kuwait, Kuwait

The present study aims to explore the role of higher education teacher professional development in the integration of visual literacy instruction within the context of higher education. Visual literacy is a crucial skill that empowers students to comprehend and generate visual content across diverse domains. However, many higher education instructors lack the necessary training and support to effectively incorporate visual literacy into their teaching practices. This research employs a survey research design to investigate the significance of teacher professional development in visual literacy implementation. The research questions address various aspects of visual literacy development in higher education, encompassing the current status of visual literacy training, effective professional development programs for teachers, suitable teaching methods, education technologies, attitudes of higher education instructors towards visual literacy, and the influence of student engagement with visual materials on visual literacy advancement in Kuwait. To collect data, a survey questionnaire will be administered to a sample of higher education teachers. The obtained data will undergo analysis employing both descriptive and inferential statistical techniques. The outcomes of this study are anticipated to provide insights into the effectiveness of collaborative, experiential, and technology-enhanced teacher professional development programs in fostering visual literacy development within higher education settings. Additionally, the study may shed light on the significance of student engagement with visual materials and the necessity for further research on effective teaching methods and educational technologies for promoting visual literacy.

71513 | *Diversity Training Across Two Teaching Contexts*  
Susie Lamborn, University of Wisconsin-Milwaukee, United States  
Julie Paasch-Anderson, University of Wisconsin-Milwaukee, United States

A memoir reading was added to two online graduate courses to support further diversity training about African-American and Hmong-American families. Forty students participated in this study. Online discussions culminated in final essays regarding the students' interpretations of the memoir. The final essays were submitted to a content analysis to reveal themes and associated categories. Data from 10 students, 5 per class, were analyzed by a second coder to address interrater reliability, with disagreements addressed by consensus. This study compares the content analysis across two classes to consider similarities and differences in how the memoirs were interpreted by students. Findings indicated that students in both classes reported themes of Multiculturalism that included Personal Understanding of the experiences of individuals of African-American or Hmong-American heritage and awareness of Discrimination and Racism. The students studying the Hmong-American memoir reported little awareness of the history and current experiences of this group. The group studying the African-American memoir, who were more familiar with the general context of racism experienced by African-Americans, gained stronger insight into details on the history of racism, including the specific topics of limited food accessibility and miscegenation laws. The theme of Family and Community emerged with focus on Grandmothers and Support pertinent to each group. The African-American experience included Extended Family, whereas the Hmong-American experience included the category of Obligation and Sacrifice. Final topic focused on Personal Growth in Identity and Resilience. For the African American author, identity occurred through farming and for the Hmong-American author, through connection to cultural practices.

# 15:35-16:35 | Orion Hall

## Wednesday Poster Session

73958 | *The Important but Less Emphasized Spatial Competence in Learning Astronomy: Decoding Domain-Specific Intrinsic-Static Spatial Information*

Yi-Chun Chen, National Taiwan Ocean University, Taiwan

Science learning materials are full of various forms of representation, including graphics, animations, maps, and figures. Many researchers have recognized the close relationship between spatial abilities and successful learning in science-related domains. Therefore, the processes of spatial reasoning in science learning were worth investigating to clarify the effects of spatial ability. Following the author's previous claim that spatial knowledge combined with task-relevant spatial skills is a better predictor of science learning (Chen et al., 2020), this study aims to provide empirical evidence to justify the crucial role of spatial competence rather than the so-called general spatial ability in spatially demanding classroom science problem solving. Forty university students and 12 experienced teachers volunteered to participate. They were asked to complete the task: draw the apparent paths of the sun on the date of the summer solstice (around June 21) at four different latitudes, 23.5°N, 60°N, 23.5°S, and 60°S. The processes of spatial competence used to solve astronomy problems were interviewed and further analyzed based on the four classifications of spatial competence proposed by Newcombe and Shipley (2015) (i.e., intrinsic vs. extrinsic and static vs. dynamic). The main results show that students' ability to decode domain-specific intrinsic-static spatial information is the key to solving domain problems, compared to the mental rotation skills that receive the most attention. Using the complex topic of astronomy as an example, this study argues that science learning materials should disclose the static spatial domain-specific knowledge conveyed in visual scientific representations that is the key to successful instruction.

### Mind, Brain & Psychology

74899 | *A Study on Mental Damage Compensation in School Bullying Cases in China*

Xuanyu Chen, Beijing Normal University, China

Feng Han, Tsinghua University, China

To investigate whether the victims' compensation claims for mental damage can be met in judicial verdicts, the research looked into 136 civil cases of school bullying on China Judgements Online, taking them as samples to conduct descriptive statistics and regression analysis on physical and mental damage, total compensation and mental damage compensation. The results show that the bullied demand higher compensation for mental damage but receive less than what they claimed; the total compensation has a positive correlation with the severity of physical damage but is less subject to that of mental damage; the mental damage compensation amount increases as the severity of mental damage goes up while the increase is not significant until the severity reaches the level of serious. These indicate that the judges pay more attention and relate more to physical injury while having bias and insufficient emphasis on mental damage, causing a lower compensation amount for mental damage. When dealing with bullying cases, the judge shall understand the situation of victims with empathy, enhance awareness of mental and psychological issues, take multiple factors into consideration in the verdict on mental compensation, decide upon the compensation amount based on the severity of mental damage, and increase the amount of mental damage compensation appropriately, as a remedy to comfort the bullied.

67599 | *Children's Suspended Judgement under Goal-guided Situation*

Chih-Hsiung Ku, National Dong Hwa University, Taiwan

HaoSin Liu, National Dong Hwa University, Taiwan

Wen-Cheng Chen, National Dong Hwa University, Taiwan

I-Shang Wu, National Dong Hwa University, Taiwan

The traditional concept of rationality advocates the autonomy of judgment and the independence of knowledge. Therefore, under such a perspective of rationality, scientists generally believe that they have the following attitudes: objective, anti-authority, open mind, questioning, willing to change, and careful Interpretation, joyful experimentation, curiosity, rationality, humility, respect for academics, etc. But the modern concept of rationality for the construction of science knowledge is no longer a result of being separated from society. Kelly, Carlsen & Cunningham pointed out that the process of knowledge development between scientists and the science community showed that social status determines science reality. Based on this concept, this study adopted the goal-guided proposed by social psychologist Ziva Kunda as the theoretical basis, and explored the relevance of the social situation of goal guiding and the scientific attitude of children.

15:35-16:35 | Orion Hall

# Wednesday Poster Session

## Nurturing Creativity & Innovation: New, Innovative & Radical Education

75031 | *King's Community Support Centre: An Exploration of Community Impact and Social Work Student Experience*

Carrie Smith, King's University College at Western University, Canada

Stephanie Baird, King's University College at Western University, Canada

Jane Sanders, King's University College at Western University, Canada

M.K. Arundel, King's University College at Western University, Canada

Sarah Macgowan, Wilfrid Laurier University, Canada

Laura Herbert, Western University, Canada

In partnership with the Salvation Army Centre of Hope and City of London, our School of Social Work developed the King's Community Support Centre (KCSC) to provide accessible, no cost, social work support to individuals experiencing homelessness or precarious housing, while providing practicum placements for BSW and MSW students. A clinic was developed where students provide counselling and support through individual and group programming, system navigation and community coordination. The focus of this presentation will be a critical reflection on the development of this program, and the learning opportunity offered to students. The objective was to examine the KCSC pilot program as both a service and an educational opportunity. The research questions were 1) What is the impact of KCSC for service users? 2) Does KCSC address long-standing gaps in service provision? 3) What is the effectiveness of KCSC as an educational program? This university, community and government partnership utilized an integrated knowledge translation (IKT) approach and employed diverse methodologies to engage service users, potential service users, students, and all involved professionals. We employed two approaches 1) participatory action research (PAR), and 2) qualitative interviews analyzed through reflexive thematic analysis. All students, involved professionals, service users and potential service users were invited using active engagement, purposive and convenience sampling strategies. Our findings reveal the ways that underhoused populations are deeply invested in their service needs, as well as the many and significant barriers they face to accessing adequate services and housing. The findings also reveal student learning opportunities and challenges.

75853 | *Indonesia Stem Creativity Competition (I-Stem-CC): Identifying Students' Creative Ideas in 'Safe the Earth'*

Irma Rahma Suwama, Universitas Pendidikan Indonesia, Indonesia

Riandi R, Universitas Pendidikan Indonesia, Indonesia

Tati Hermawati, Senior High School 9, Indonesia

Kamallulah Thahir, Universitas Pendidikan Indonesia, Indonesia

Creative thinking skills can be developed by challenging activities that make students create ideas to face the challenges. It needs active learning environment that can trigger students' creative ideas. Learning activities in Indonesia have been emphasizing creative thinking skills since the new goals in the new curriculum is published. We developed national competition that focus on creativity in STEM, calls I-STEM-CC. It aims to train and identify the creative students. They compete to be the most creative students by showing their best idea through creative prototype or products. The competition divides into three categories; creativity, mechatronics, and invention. It is adapted from International Mathematical and scientific Creativity Competition (IMSCC) that held annually by Foundation of Advancement in STEAM (FAS), South Korea. We got 111 team of participants that will be selected to the final competition. The creative ideas are collected from the blueprint and products. Theme of the competition is 'safe the earth'. The results showed that most of the participant generating ideas from alternative energy, clean environment, and natural disaster. There are only 6% of original ideas, but most of them are flexible and fluency in generating creative ideas.

## Teaching Experiences, Pedagogy, Practice & Praxis

75656 | *Minority Music Education on Children's National Cultural Identity Influence and Teaching Countermeasures of Ethnic Minority Music Education*

Ma Jing, Mahidol University & Sichuan Conservatory of Music, China

Music education for ethnic minorities is a form of music education that has the potential to cultivate sentiment and character, and the cultivation of a sense of national identity is an indispensable part of ethnic culture. The so-called "national identity" means that children should have a sense of belonging to their motherland and nation, and should be proud of being Chinese. In this study, an experimental approach to music education was used to teach three classes in an elementary school in Chengdu, Sichuan Province, China, five lessons on the topic of national culture. The researcher found that strategies such as exploring the culture and history behind ethnic minority music, making good use of ethnic minority game music repertoire, creating activity scenarios for ethnic minority music, and utilizing music lessons for active inter-ethnic communication were effective in enhancing children's sense of ethnic cultural identity.

# 15:35-16:35 | Orion Hall

## Wednesday Poster Session

75363 | *A Study on the Impact of Social Support on Work Meaningfulness of Elementary School Bilingual Teachers in Taiwan*  
Yu-Hsiang Liu, National Tsing Hua University, Taiwan  
Chuan-Chung Hsieh, National Tsing Hua University, Taiwan

After Taiwan initiated the 2030 Bilingual Policy, bilingual teachers encountered significant resistance while implementing this policy. Moreover, the heavy workload and preparation required for bilingual education, combined with the lack of bilingual teaching staff and materials, have led to substantial work-related stress for bilingual teachers. Social support has the potential to enhance teachers' work meaningfulness and alleviate their job-related pressures. Therefore, understanding how social support impacts the work meaningfulness of bilingual teachers is the central focus of this research. The research methodology utilizes semi-structured interviews and data analysis as supplementary techniques. The research subjects were selected through purposive sampling, involving interviews with three bilingual teachers from different elementary schools. The research findings are as follows: 1. Due to the hasty implementation of the bilingual policy, some teaching staff positions have not been adequately filled, leading to many incumbent bilingual educators are predominantly staffed by English teachers. Because these teachers lacked relevant training and observation during their teacher training regarding bilingual education, they require support from schools and the general public. 2. Bilingual teachers find a sense of achievement in the growth of their students and themselves. This occurs when students improve their English language skills, become more motivated to speak English, and when teachers enhance their cross-disciplinary skills by sharing bilingual experiences. This growth fosters a greater sense of professional purpose and supports bilingual education policies. 3. Most bilingual teachers lack training in bilingual curriculum development. Both informational and instrumental social support, such as guidance and advice from Education Bureau, observation of bilingual classes, and sharing of teaching materials, influence their work meaningfulness.

75806 | *Identifying Taiwanese High School Science Teachers' Perception of Scientific Inquiry Classroom Environment*  
Tzu-Chiang Lin, National Kaohsiung University of Science and Technology, Taiwan

Presently, educators in the field of science education have reached a consensus regarding scientific inquiry in facilitating learners' successful exploration and comprehension of science concepts. Teachers' perception of scientific inquiry was especially deemed critical to take shape deriving context in classroom. This study hence aims at exploring perceptions of scientific inquiry within the classroom environment, as held by high school science teachers. The investigation also tried to figure out if perception gaps existed in what participants expected and experienced. To afford the research purposes, this study spent two years to investigate Taiwanese high school teachers' perceptions regarding scientific inquiry in classroom. During the initial year, a combination of bibliographic coupling analysis and qualitative interviews was employed to comprehensively explore participants' perceptions of the scientific inquiry classroom environment. The insights from this phase were subsequently used to formulate a conceptual framework for developing and validating a questionnaire to elicit teachers' perceptions of the scientific inquiry classroom environment in the second year. In addition to the questionnaire, existing instruments that measure teachers' self-efficacy of science teaching, science teacher knowledge, as well as conceptions of learning science were also administered to unveil how these factors moderated perceptions of scientific inquiry classroom environment. Drawing from the research findings of the research, this study provides recommendations that extend to researchers, teachers, and educational stakeholders, outlining strategies for enhancing science education through the effective implementation of scientific inquiry.

75145 | *The Effects of Learning Management System on the Math Motivation and Achievement of Junior High School Students*  
Theresa Caya, De La Salle Lipa Integrated School, Philippines

The Learning Management System (LMS) changes most students' learning trends nowadays. It provides learners with online resources intended for self-paced learning design. However, the usefulness of LMS, especially to 21st-century learners, does not guarantee effectiveness in all areas of learning, considering that not all students have the capability to adapt to this modality, predominantly in developing mathematical proficiency. Hence, this research aimed to investigate the effects of LMS on the motivation and mathematics achievement of some Junior High School students and enabled the researcher to propose some enhancements to the existing LMS implementation. Research-based survey questionnaires were administered to 126 students and eight teachers to identify their perspectives about using LMS in Math class and characterized its impact on the motivation and achievement of JHS students. The previous year's grades of the students in Math were also utilized to sufficiently satisfy the research objectives. The descriptive-correlation methods revealed that the Grade 8 students are motivated in their Mathematics achievement utilizing the LMS in full of which, significant difference were noted in their grades. Teachers were also noted being motivated by the use of LMS. No significant relationship between the student's level of motivation and their achievement during the minimal and full utilization of LMS, implying no direct effect found on mathematics achievement as a result of utilizing the LMS. Enhancements of LMS is proposed for Math Department.

73695 | *Pedagogical Strategies for Reflection that Promote Student Growth*  
Tomoko Maruyama, Ehime University, Japan  
Masahiro Inoue, Keio University, Japan

Institutions of higher education are the starting point for students in pursuing lifelong autonomous careers. To become autonomous learners, they must make independent choices and decisions about the content of and strategy for learning. In this regard, reflection is an essential component of quality learning and the expression of such learning. In addition, it forms part of learning in which learners seek to understand new knowledge and relate it to previous knowledge. Intentional reflection in learning influences one's involvement in the learning process, the interpretation of a task at hand, and strategies selected and adopted. This study analyzed a learning portfolio that continuously recorded the results of the reflection of students on their experiences, which was conducted in a leadership education program for first-year master's students in the Graduate School of Engineering and Science. Based on the results of this analysis, the study conducted interviews with students who demonstrated positive behavior changes. To elucidate the mechanism of behavior change through reflection, the study focused on the type of semantic environment and factors involved in each other to produce behavior change. On the basis of the results of the quantitative and qualitative analyses and of the literature review on reflection, we propose educational strategies for reflection that promotes student growth.

# 15:35-16:35 | Orion Hall

## Wednesday Poster Session

76223 | *Community and Self-Efficacy in Higher Education: The Impact of University-Based Musical Theatre Programs on Diverse Student Populations*

Lin Li, University of Mahidol, Thailand

Ni-on Tayrattanachai, University of Mahidol, Thailand

This research investigates the impact of a university-based musical theatre program on enhancing self-efficacy among a diverse student body in a higher education setting. Utilizing a mixed-methods approach, the study engaged 40 undergraduate students from various disciplines. Quantitative data were collected pre- and post-program using a validated Self-Efficacy Questionnaire and analyzed through paired-sample t-tests. In addition, semi-structured interviews were conducted with 15 randomly selected participants for qualitative insights. A comparison group, composed of 20 students who did not participate in the musical theatre program but engaged in standard university courses, was also assessed using the same Self-Efficacy Questionnaire. Preliminary findings demonstrate that involvement in musical theatre significantly enhances self-efficacy across various academic and social parameters. These gains were observed consistently across different student demographics, including those from varied socio-economic, cultural, and academic backgrounds. Qualitative data reveals a synergistic effect on the university community, including increased interdisciplinary collaboration and community engagement, further enhancing the program's efficacy. The study suggests that university-based musical theatre programs not only serve to boost individual self-efficacy but also contribute to fostering a sense of community and interdisciplinary engagement within a higher education setting. These findings provide a compelling argument for the inclusion of musical theatre in university curricula as a means of promoting both personal and community development.

73042 | *Planning and Facilitation of Creative Parent-Child Music and Rhythm Interaction: A Case Study*

Hsu Hui-Chun, National Tsing Hua University, Taiwan

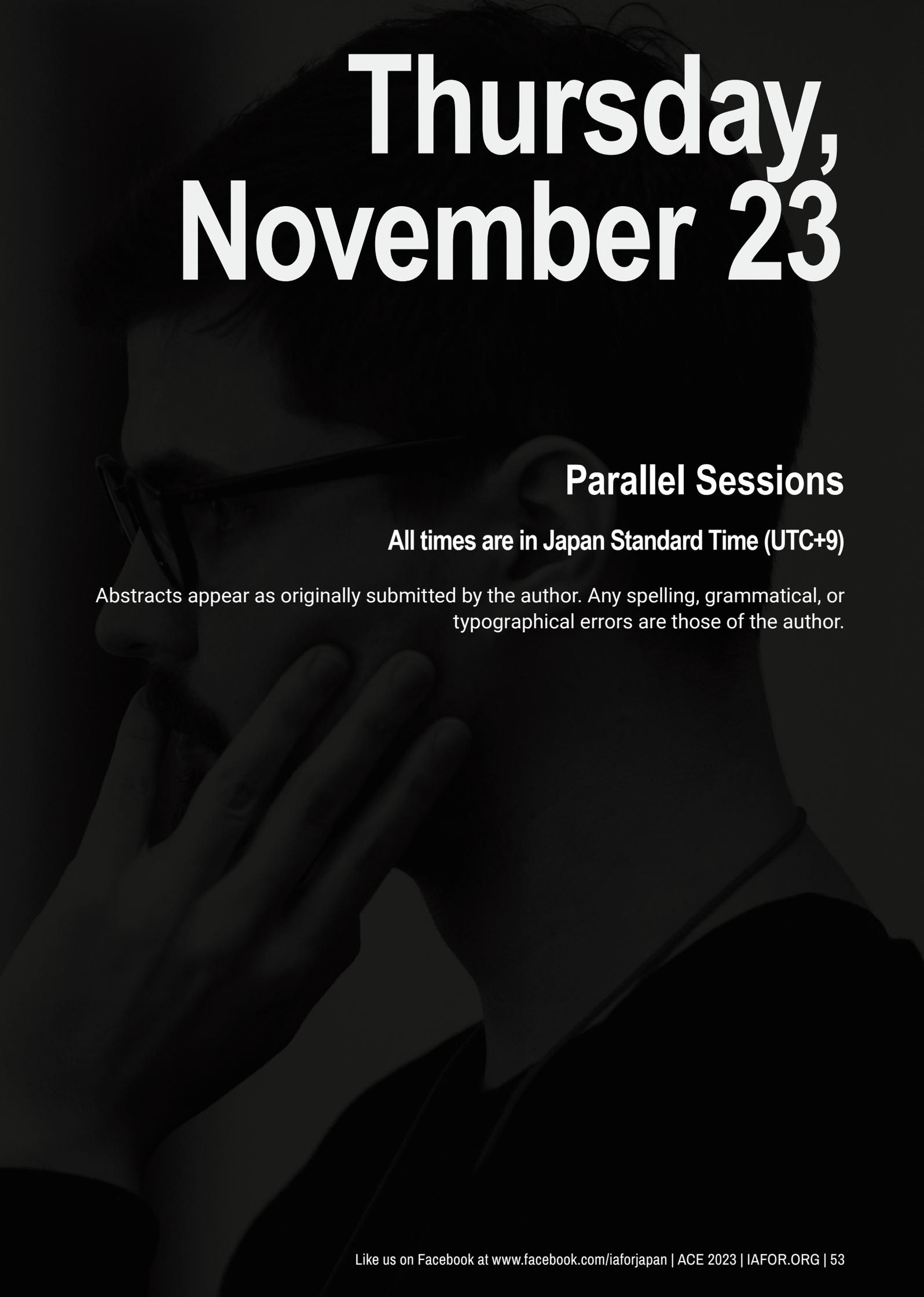
This study explores the interactive nature of parent-child music and rhythm creativity, particularly in terms of planning and facilitation. As a professional music creator and author of numerous audio storybooks, I have devoted particular attention to parent-child music education since becoming a mother. This has prompted me to ask what are the necessary components for planning parent-child music and rhythmic creative interaction, and what are the guiding approaches for them. Narrative enquiry was employed to detail how the researcher combines the aesthetic experiences of her child's life with interactive parent-child music and rhythm scaffolding. Curriculum content and instructional strategies are designed around the child's physical and psychological development. Observational records and reflective journal by myself, and data including rhythm videos, reflective dialogues, and creative audio-visual materials are collected for contextualized narrative and analysis. The research findings are as follows: (1) In terms of planning, the researcher designs sequential activities using singing, listening, rhythm, movement, instrumental play, and audio-visual elements, aligning with the characteristics of the aforementioned music activities and elements to gradually develop the integrated representation of auditory, visual, and kinesthetic experiences in parent-child interaction. (2) Regarding guiding approaches, the researcher employs a variety of teaching aids and strategies, such as original music materials, improvisational piano teaching, instrument manipulation, and audio-visual materials, to encourage children's active engagement and creative direction while allowing adults to follow their lead.

73041 | *Dancing Tang Poetry Imagery: An Action Research into the Use of Creative Dance in Young Children's Aesthetic Development*

Li Shun, National Tsing Hua University, Taiwan

Young children like to dance. But how can creative dance be combined with other arts to inspire children's aesthetic experiences and extend their artistic literacy and understanding? Specifically, how can creative dance be used with Tang poetry in a way that transforms the latter into comprehensible language and imagery for the youngsters, and allows them to represent it in movement? Those were the questions posed in this action research that involved 30 kindergarten children aged five to six over two-months. The research consisted of planning, implementation, observation, and reflection. Teaching strategies included guiding the children towards certain imagery, language and physical materials, demonstration, and peer interaction. Two poems were used, the teaching strategies for both involving animal imitation and cooperative interaction. Visual imagery was generated from the text and used to motivate different movement dynamics, space, and relationships; and stimulate representation and richness in children's own narration, imagery, creativity and physical expression. Data collected included photographs, videos, a reflective journal, with critical dialogue also held with peers, all used to analyze the youngsters' poetic perception and physical responses. The outcomes show clearly that imitation and peer demonstration that links animal imagery and characteristic movement by emphasizing body parts and dynamics can bring the text to life and enhance children's own animal imagery and representation. Furthermore, when guiding the children's transformation of poems' words into interactive scenes and relationships between people and objects, peer collaboration helps develop the youngsters' spatial awareness, and aesthetic and expressive movement qualities.





# Thursday, November 23

## Parallel Sessions

All times are in 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 603

# Thursday Onsite Presentation Session 1

## International Education

### Session Chair: Yu-Li Wang

09:00-09:25

75103 | *Exploring Classroom Interactions to Facilitate the Tacit Knowledge Construction of International Baccalaureate Secondary School Students in Hong Kong*

Aruna Venkatesh, The Hong Kong Polytechnic University, Hong Kong

Henry Ma, The Hong Kong Polytechnic University, Hong Kong

In an interconnected and global society that is rapidly changing, it becomes imperative to equip students with the required tacit life skills to navigate the challenges of the modern world. The International Baccalaureate (IB) is a highly regarded educational system providing a holistic and interdisciplinary approach that nurtures its students as global citizens with a broad cultural perspective. Nevertheless, although the IB learning mode is inquiry-based and project-based, which aids students' tacit knowledge construction, this field receives relatively little investigation. This study expands on the research of Venkatesh's (2021) study on university design students to study the tacit knowledge construction of secondary school IB students in Hong Kong. The focus is on the role of social interactions in the classroom that facilitates its construction. A mixed-method approach was designed for data collection and analysis. The study's outcomes contribute towards developing a framework and suggest teaching strategies for effective tacit knowledge construction, thereby improving their understanding of how tacit knowledge is constructed through active learning.

09:25-09:50

76061 | *Culture Games: Chinese Students Perspective of Sociocultural and Academic Adjustment at an Australian University*

Dennis Lam, Western Sydney University, Australia

The transition of international students to academic studies and lifestyle in a cross-cultural setting is not that simplistic. These changes include dealing with linguistic proficiency and communicative competence both in an academic and social setting, as well as adjustments to discourse styles and worldviews that need negotiation. There is academic literature that focuses on niche areas, such as language mastery; psychological adjustment; academic adjustment; changes in self-identity; social networking, and lifestyle. However, this niche approach ignores the fact that culture exists in a complex system, where the confluence of these factors may result in wide variations of cross-cultural adaptation (CCA) experiences. This situation is particularly acute for Chinese international students studying in Australia, where the Australian and Chinese discourse systems are at antithetical positions. This study will use a mixed-methods approach, through online questionnaires and a short-term longitudinal study, to ascertain the positive and negative CCA experiences of Chinese students during their social and academic sojourn in Australia. Findings suggest that the confluence of academic and sociocultural factors results in Chinese students' CCA experience having wide variations from 'perceived' cohort behaviour. Moreover, attitudes from members of the host culture may play an influence regarding these complex experiential differences.

09:50-10:15

75751 | *Primary School English Teaching During COVID-19: Preliminary Results of a Multiple Case Study in Rural Schools in Costa Rica*

Patricia Lopez-Estrada, Instituto Tecnológico de Costa Rica, Costa Rica

Jonathan Elizondo-Mejias, Universidad Estatal a Distancia de Costa Rica, Costa Rica

COVID-19 emerged as a pandemic that paralyzed the educational world in 2020. The Costa Rican Ministry of Education (MEP) took up two modalities, distance education (2020) and combined education (2021), with in-person education finally restored in 2022. This multiple case study consists of three single case studies in three different educational districts in Costa Rica's Huetar Norte Region: San Carlos, Norte-Norte, and Sarapiquí. The three studies collected and triangulated data from 15 primary-school teachers using semi-structured virtual interviews, document gathering, video recordings, photo-elicitation, and body mapping. Content analysis was performed using WebQDA and ATLAS.ti to categorize the data. This multiple case study aims to describe the perceptions of primary English teachers regarding distance, combined, and in-person education to increase understanding of the educational context during the health crisis. The first study is completed, the second study is in the final stages of data interpretation, while the data are currently being analyzed for the third study. Preliminary results include identification of the tensions experienced by teachers as well as the emergence of self-efficacy skills required to comply with the modalities, the lack of coordination and communication between the MEP and the school districts, and the distinctive characteristics of each modality. Finally, due to their socioeconomic features, rural schools were also found to experience other misfortunes that became more visible during the pandemic. This multiple case study seeks to expand on existing literature and to better apprehend the phenomenon of the pandemic and its educational implications in rural communities in Costa Rica.

10:15-10:40

75812 | *An Explorative Study of How the Chinese Students Express Their Opinions in Taiwanese Classrooms*

Yu-Li Wang, Chinese Culture University, Taiwan

Due to the different historical and political claims of sovereignty, the cross-strait relationship between Taiwan and mainland China remained tense from time to time. The political climate had been extreme hostile when Xi, Jinping and Tsai, Ing-wen took the leaderships. Taiwanese government opened the policy for mainland Chinese students to pursue University degrees starting from 2011 and terminating around 2020 due to the COVID-19 pandemic. This study aimed to explore the influential factors of the willingness to express opinions upon mainland Chinese students in Taiwanese classrooms. The "in-depth interviews" method was employed, sixteen university degree students from the field of education, arts and humanity, social science, journalism, business and management, and law were interviewed from March. 28, 2022, to September 30, 2022. The courses from the above fields often designed with the social issue discussions, sometimes the agenda could be sensitive for the Chinese students. The results showed that the cross-cultural sensitivity and perceived risk would affect the judgement of the willingness to express opinions. The other factors that affected the expression of opinions in the classroom include: the familiarity or interest of the social issues, existing the factual errors regarding China during the discussion, risk assessment of speaking, professor's stand and tolerance toward the issues, trust between teachers and students, the classroom atmosphere and finally, the peer trust.

10:55-12:35 | Room 603

# Thursday Onsite Presentation Session 2

Education & Politics

Session Chair: Warat Karuchit

10:55-11:20

75770 | *Education as a Tool for the Democratic Process: Evidence in Latin America*  
Igor Rodrigues, Enap – National School of Public Administration, Brazil

Education is widely recognized as a catalyst for personal development, social progress and economic growth. However, the benefits of education go far beyond the individual level. Such effects give rise to a series of positive externalities, which spread throughout society. The most significant factors of this effect have played a very important role in making democracy a viable system. This conception, which begins with Tocqueville in 1835, is received in the academic scene with the work of Lipset (1959), who reports that education is fundamental to sustain a democratic system. In this sense, the objective of this work is to analyze the causal relationship between education and democracy. Taking advantage of the similarity of the historical-political context referenced by Latin America, we seek to objectively measure whether education improves the recognition of democracy as a social, economic and cultural condition that allows the free and equal exercise of political self-determination. To identify the causal effects of education on political behavior, we must take into account the factors that jointly determine educational choice and political behavior. Therefore, we will employ the Generalized Method of Moments (GMM), which makes it possible to control for the endogeneity problem of the dependent variable in the dynamic panel model and allows to control for omitted variable bias, measurement error and unobserved heterogeneity problems. The results found in this work provide convincing evidence for the causal relationship between education and democracy.

11:20-11:45

74786 | *State Control of School Education in Colonial and Post-colonial India*  
Shivakumar Jolad, FLAME University, India  
Khushi Rajpuria, FLAME University, India

Studies have shown that schools are best governed and managed at the local level by local bodies and communities. In the Indian context, it has been argued that educational decentralisation received a significant boost post the constitutional amendments of 1992, which mandated local government school management in rural and urban areas across India. However, drawing from the history of school management in India, we show that in colonial India, government-funded schools were locally managed by district boards and municipal bodies. By studying the education Acts of Indian states post-independence, we show that nearly all states took to a centralised management system with state-controlled appointment and transfer of teachers and funding. Nationally, about 77% of government schools are managed by the state Department of Education, while only 18% of schools are controlled by local bodies. By analysing sections of the Right to Education Act of 2009, we show that while the Act advocates for decentralised management of schools, it fails to devolve funds and functionaries to the local level. We argue that India's constitutional structure, weak fiscal devolution to local bodies, bureaucratic mistrust of local authorities, fear of local elite capture and upper caste control, and teacher union lobbying has led to centralised state control of education.

11:45-12:10

74900 | *The Implications of Homeschooling on Democracy Through the Eyes of John Dewey*  
Bernadette C. Ilao, University of the Philippines-Diliman & Ateneo de Manila University-Junior High School, Philippines

This paper examines how homeschooling has a significant impact on democracy, as envisioned by influential educational philosopher John Dewey. As a growing trend in alternative education, homeschooling has raised questions about how it would affect societal advancement and democratic principles. Progressive education pioneer John Dewey offered important insights into the connection between education and democracy. His theories placed a strong emphasis on the need for education in promoting social participation and active citizenship, which serve as the cornerstones of a functioning democratic society. The study explores how homeschooling aligns or deviates from Dewey's ideal of democratic education through a thorough analysis of Dewey's writings and educational theories. It tries to explore the ramifications of homeschooling through the perspective of John Dewey's educational philosophy. Moreover, it aims to add to the continuing conversation about how education helps to create democratic societies. Understanding the advantages and drawbacks of homeschooling considering Dewey's theories can help legislators, teachers, and parents determine the most effective ways to advance democratic principles and civic involvement in the context of modern education.

12:10-12:35

71981 | *Thailand's Digital Media Ethics Standard: Guideline for Training of State Officials*  
Warat Karuchit, National Institute of Development Administration, Thailand

Virtually all state agencies in Thailand nowadays use digital and social media as public relations tools. However, there never was an official code of digital media ethics. Therefore, the Department of Public Relations of Thailand (PRD) needed to establish a standard digital ethics for their own nationwide operation and for other state agencies, which will be taught and reinforced in their routine trainings. Two types of method were used to collect data: 1) documentary research of relevant media laws and ethics from Thailand and overseas 2) two rounds of focus groups of sixteen key informants, consisting of digital media operators, journalists, academics, and state PR officials. The researcher was able to finalize four main principles and 33 sub-principles of digital media ethics for state officials as follows: 1) Accuracy: ten sub-principles such as fact-checking, prompt correction; 2) Impact: twelve sub-principles such as being careful of potential harm, using caution for sensitive issues and sensitive people; 3) Responsibility: five sub-principles such as informing public of mistakes, apologizing publicly 4) Public Interest: six sub-principles such as putting public interests above all else, avoiding conflict of interests. After this new digital code of ethics handbook was published, the researcher was assigned to conduct several trainings, both online and onsite, for PRD's personnels nationwide. The handbook was distributed to state agencies and promoted as Thailand's standard for digital media usage. The PRD plans to incorporate this digital ethics standard into formal education in the future as a part of media and digital literacy curriculum.

12:50-14:05 | Room 603

# Thursday Onsite Presentation Session 3

## Socio-Economic Challenges in Education

Session Chair: Fengshu Liu

12:50-13:15

74095 | *What are the Determinants of the Willingness in Pursuing a Doctorate Degree? A Quantitative Analysis of 2021 Data in China*

Jingjing Niu, Tsinghua University, China

Yu Xiao, Tsinghua University, China

The aim of this study is to explore the various factors involved in pursuing a doctoral education. We adapted human and social capital theory as the theoretical frameworks to examine the different academic and economic factors involved in pursuing a doctoral degree, considering different institutional backgrounds. The data used were collected from the Graduate Student Satisfaction Survey conducted by the China Academic Degrees and Graduate Education magazine. We obtained the data from 52,458 respondents in 2021. Descriptive statistics and logistic regression were used in the analysis. The results show that gender and family income significantly affected students' decision to pursue a doctoral education. In addition, academic performance factors, such as the number of published papers, projects involved had positive effects on willingness in doctoral education. Students in "World-class Construction University" were more likely to pursue a doctoral degree than those in "Non-double First-class Construction Universities". This study has implications for the demands of postgraduate students taking doctoral degrees.

13:15-13:40

76274 | *Multi-Party Partnerships and Sustainable Education for Shared Prosperity: Impact Study Among Adult Mat Weavers in Samar, Philippines*

Elmer Irene, Samar State University, Philippines

The aim of the study is to explore the pivotal role of multi-party partnerships and sustainable education in fostering shared prosperity among mat weavers in Samar, Philippines. In an effort to address socio-economic challenges and enhance the livelihoods of mat weavers, this study investigates the impact of collaborative efforts among various stakeholders, including local communities, government bodies, non-governmental organizations, and educational institutions. By employing an impact assessment, the research evaluates how these partnerships contribute to the advancement of sustainable education initiatives, ultimately leading to improved socio-economic conditions and enhanced well-being among mat weavers. The study utilizes a mixed-method approach, combining qualitative interviews among focal persons of agencies and organizations as well as key officials and members involved in the project and quantitative surveys on the socio-economic status, inventory of mat weaving skills, and impact of the collaboration to the industry and the mat weaving community. The findings underscore the significance of multi-party collaborations from educational institutions, local government units and line agencies in promoting sustainable education, fostering skills development, lifelong learning, preserving cultural heritage, and empowering mat weavers to achieve shared prosperity. This research not only sheds light on the transformative potential of such partnerships but also provides valuable insights for policymakers, practitioners, and stakeholders invested in sustainable development goals in the countryside.

13:40-14:05

72959 | *From 'Educational Desire' to 'Educational Anxiety': The Case of Rural Families in China's Remote Areas*

Fengshu Liu, University of Oslo, Norway

The socio-economic changes in recent decades, coupled with a deep-rooted cultural belief in education, have resulted in unprecedented 'educational desire' and 'educational anxiety' in China. Although previous research recognizes strong educational desire in both urban and rural societies, little research has investigated how it may be playing out in rural families. Furthermore, the discussion about 'educational anxiety' has solely concerned urban parents, reflecting an assumption that the notion can hardly apply to rural parents, especially those in poor/remote areas. These trends fail to do justice to present-day rural families' complex engagement with their children's education. This study explores how both 'educational desire' and 'educational anxiety' may be at work, and in tandem, to shape rural families' lived experiences regarding their children's education, drawing on interviews with parents/care-takers in 39 families and observation in 5 households in a remote area. The participants typically think higher education is of paramount importance for their children's future welfare, or 'the only way out', hoping that their children will score into a university as prestigious as possible. Most of them were constantly anxious about their children's school performance and future prospects, and frustrated by their own inability to help the child academically. Thus, rural families typically have strong educational desire and intense educational anxiety—no less than urban middle-class families do. However, the rural educational 'desire' and 'anxiety' have rural-specific manifestations due to the specific Chinese rural circumstances shaped by the rampant urbanization and persistent rural-urban disparities—a form of structural violence per excellence.

14:20-16:00 | Room 603

# Thursday Onsite Presentation Session 4

Educational Leadership: Social Justice & Development

Session Chair: Lay Huah Goh

14:20-14:45

75482 | *A Study on Principal Promote Leadership on SDGs of Taiwan's High School*

Chin-Chang Chang, Dong-Shi Industrial Senior High School, Taiwan

Chuan-Chung Hsieh, National Tsing-Hua University, Taiwan

After the earth has been ravaged by COVID-19. The healthy life and sustainable development of human beings are gradually integrated into the educational policies of each country. Taiwan's Ministry of Education also proposed a learning blueprint for "New-generation Environmental Education Development". To train students to be able to face the challenges in the future. Therefore, the combination of principal sustainable leadership of Taiwan's high school with the United Nations Sustainable Development Goals (SDGs) is an important study topic. This study uses interviews and other data as the basis of qualitative research, using case studies. The subjects are the principal of a technical high school in Taiwan, one teacher who is the first-level administrative director, three teachers and three students. The interview results are organized according to the 17 sustainable development goals of SDGs as follows: 1. Lead students through alternative learning periods. learn about poverty and hunger from life and strategies on how to promote healthy lifestyle. 2. Hold class competitions and team sports, learn about energy saving and carbon reduction and how to achieve sustainable development targets from actual participation. 3. Hold lectures and student councils, realize about interpersonal relationships and how to improve civic competency from observation and learning. 4. Promote international service learning for students, experience the culture of various countries and how to improve the quality of social housing through exchange activities. 5. Combining industry and universities to implement collaboration between industry and school, learn about industrial innovation and how to develop career planning from practice.

14:45-15:10

75452 | *Construction of Social Justice Leadership Indicators for Elementary School Principals in Taiwan's Indigenous Areas Regions*

Chinting Lee, Ching-An Elementary School, Taiwan

In order to promote Indigenous education, Taiwan has successively enacted relevant laws such as the "Basic Law of Indigenous Peoples", "Indigenous Peoples Education Act", "Indigenous Peoples Language Development Act", and "Experimental Education Act" since the lifting of martial law. These laws aim to achieve significant goals of improving academic performance, cultural inheritance, and safeguarding social justice within Indigenous communities. Social justice leadership by principals in Indigenous areas refers to the leadership approach where school principals emphasize and advocate for social justice values within Indigenous schools. This leadership style particularly pays attention to the needs, culture, traditions, and history of Indigenous students and communities, ensuring they receive equitable educational opportunities and are treated with respect. The purpose of this research is to construct indicators for social justice leadership among elementary school principals in Taiwan's Indigenous areas. By analyzing and exploring relevant domestic and international research and assessment tools, combined with the Delphi method involving 20 expert consensus and the Analytic Hierarchy Process, a comprehensive set of indicators for "Elementary School Principals' Social Justice Leadership" that aligns with the current situation is developed. The research findings reveal that the indicators for elementary school principals' social justice leadership are categorized into six dimensions and twenty-four specific indicators. These dimensions encompass "Possession of Traits of Social Justice Leadership", "Creating an Environment of Educational Equity", "Enhancing the Teaching Environment in Indigenous Homelands", "Fostering Ethnic Identity", "Elevating Academic Achievement for Indigenous Students", and "Enhancing Sociocultural Communication Abilities".

15:10-15:35

70867 | *Trauma-informed Leadership: A Case Study of Educational Leadership and Crisis Management of Secondary Schools*

Grace Campos, Bicol University Graduate School, Philippines

Hennie Pama - Lomibao, Bicol University Graduate School, Philippines

This qualitative research utilized a case study research design that investigated the school heads' leadership and crisis management styles. It enlisted the participation of twenty (20) school heads using convenient sampling based on inclusion criteria. A semi-structured written interview based on Lawson (2021) was used to collect data. To display the narratives, the data were transcribed, examined, compared, and carefully categorized into several themes by using nVivo software. The findings revealed that school principals employed: 1. Varied leadership practices; 2. Modeling leadership behavior; 3. Decision-making and communication; and 4. External support. This study's findings highlighted the need to apply situational leadership practices to strengthen school heads' instructional and administrative duties, particularly during times of global crises.

15:35-16:00

73118 | *Teachers' Perception of Leadership Styles During the COVID-19 Pandemic Crisis*

Lay Huah Goh, Xian-Jiaotong Liverpool University, China

During the COVID-19 pandemic, educators had to move their teaching and learning to online platforms. Such a change was unforeseen and therefore became an educational crisis. In order to execute the change in teaching strategies, teachers expect a set of behaviour from their leaders to facilitate and support these changes. This survey study used the Multifactor Leadership Questionnaire (MLQ) to investigate 124 teachers' views about their preferred and perceived effective leadership behaviour and actions that would have supported them and the challenges they faced with their teaching during the COVID-19 pandemic crisis. Findings indicated that there was significant difference between teachers' preferred leadership and teachers' perceived experience of leadership during the COVID-19 pandemic crisis. The preferred leadership style was transformational.

16:15-17:30 | Room 603

# Thursday Onsite Presentation Session 5

Interdisciplinary, Multidisciplinary & Transdisciplinary Education

Session Chair: Jhoanna Andrea De Leon

16:15-16:40

76074 | *A Silent Epidemic in South Korea: The Unspoken Agony of Sexual Violence Against Foreign Women and Strategies for Combatting It*

Shakerra Bartley, University of Utah, South Korea

This study investigates the extent to which systemic structures in South Korea affect the prevalence, reporting, and redressal of sexual violence incidents involving foreign women and proposes solutions to address this issue. According to statistics, every hour, there are 3.4 reported cases of sexual crimes against women. Yet, an estimated 78% of women keep their attacks hidden. Despite nearly one million foreign women residing in Korea as of 2020, the National Women's Hotline, Danuri, received 55 calls from foreign women the entire year regarding sexual violence. These numbers indicate significant under-reporting. This research closely follows five anonymous women who retell their struggles of facing sexual assault and its impact. Incorporating a mixed-methods approach, including evidence from interviews, news articles, reviews, journals, and the Korean Statistical Information Service, this research found significant barriers. The information suggests that systemic factors, including language differences, cultural norms, bureaucratic processes, and existing laws, profoundly affect the reporting and perceptions of sexual violence. All interviewees expressed feeling 'doubly silenced' due to a lack of language suitable resources, reports often leading to vengeance indictments from the alleged assailant, poor handling from authorities, visa loss, or deportation in some cases. The findings emphasize the urgent need for systemic reforms and accessible educational resources, like infographics and videos, to aid victims. Derived products from this research include a mini docu-series and educational infographics.

16:40-17:05

74760 | *Comparison of Entrepreneurship Education in the Vocational Education and Training for Disables Between South Korea and Finland*

Youngjoon Kim, Seoul School of Integrated Sciences and Technologies (aSSIST), South Korea  
Jinhee Choi, aSSIST University, South Korea

People with disabilities, constituting 15% of the world's population, represent the largest ethnic minority group. Despite being legitimate citizens of society, individuals with disabilities are often neglected in their needs, and excluded in educational and training opportunities. Although Vocational Education and Training (VET) policies for persons with disabilities have received international attentions, there is insufficient scholarly and practical discussion on how different countries implement and facilitate VET for people with disabilities from comparative educational perspective. The purpose of this study is to compare entrepreneurship education for persons with disabilities in Korea and Finland, to analyze the differences between government-led and civil society-led education systems through the framework of Inclusive Entrepreneurship Education for person with Disabilities ([IEEPD] Kruger & David, 2020). We reviewed periodic government reports, websites and flyers, and publications from both government and transnational organizations on administrative structure, history, and regulations of each country. Then we systematically examined ten government published reports on comprehensive plan and employment promotion for the people with disabilities published between 1998 and 2022 with IEEP framework. An analysis reveals five differences in policy approaches for people with disabilities between Korean and Finish in their goals and objectives, operations, and teacher education. The study emphasizes the need to re-evaluate VET policies for individuals with disabilities from government-led and civil society driven models to better serve changing social needs for diversity and inclusion. This paper is the first step to fill the gap in knowledge on VET for people with disabilities between Asia and Nordic countries.

17:05-17:30

73571 | *Effects of Korean Drama to Core Values Formation of Nationalian Students*

Jhoanna Andrea De Leon, National University-Manila, Philippines

Jemma Gonzales, National University-Manila, Philippines

Danielle De Guzman, National University-Manila, Philippines

One of the current wave of proclivity towards media and technology amongst this generation of individuals is binge-watching series so they can stay updated on the latest trends. And due to this, K-drama has become a staple in the lives of people, regardless of age or status in the world. Considering the continuous surge of K-drama consumption, these shows may have affected the values formation of young viewers, especially students. The purpose of this research is to find out if watching K-drama have affected the values formation of students of National University- Manila. The research utilized a mixed method design wherein the data gathering procedure was through surveys and in-depth interviews. The sample size was (n= 309) college students of the university. Results exhibit that 89.32% of respondents watch K-drama-averaging to 16.30 hours of screen-time a week. Through the media dependency theory, the resulting length and intensity of consumption of K-drama may influence respondents in different ways - one of which includes formation of values. Participants also communicated that through watching K-drama, they have been able to understand and reflect on certain issues in society, influencing their own stance on what is morally right. This can be explained through the symbolic interactionism theory that recognizes symbols (values) in stories, as they are relatable and depicts real life scenarios that influence viewers in the long run. As such, there is definitely a connection between K-drama and core values formation since these shows portrays the values being promulgated by the university.

18:10-19:25 | Room 603

# Thursday Onsite Presentation Session 6

Higher Education

Session Chair: Qizhang Liu

18:10-18:35

70989 | *Mathematics Doers: Exploring the Impact of a Specifications Grading Calculus I Course on Latina/o Students' Mathematics Identity*

Luis Fernandez, The University of Texas Rio Grande Valley, United States

Cristina Villalobos, The University of Texas Rio Grande Valley, United States

Martha Asare, The University of Texas Rio Grande Valley, United States

Mayra Ortiz Galarza, The University of Texas Rio Grande Valley, United States

Kaitlyn Serbin, The University of Texas Rio Grande Valley, United States

For many Latina/o college students, mathematics is a formidable academic challenge. As a result, courses like Calculus have become gatekeepers that (un)intentionally impede many Latina/o students from pursuing STEM-oriented degrees, particularly in the fields of Engineering. To further combat these inequities, Calculus courses should embrace innovative pedagogies that increase students' achievement by promoting Latina/o students' mathematics identity development. We argue that a Calculus course with Specifications Grading, a specific type of pedagogy that adopts Growth Mindset attributes, fosters students' growth-mindset and perseverance in mathematics, and, therefore, fostering a stronger mathematics identity. In this study, we examined the mathematics identity development of  $n = 720$  Latina/o students enrolled in Specifications Grading Calculus I and non-Specifications Grading Calculus I across one academic year. Using a validated survey and ANCOVA, we compared the PRE and POST changes in the students' self-perceived mathematical competence and performance, recognition as mathematics doers, and interest in mathematics. We also explored the overall change in their self-perceived mathematics identity. We discuss how aspects of the Specifications Grading pedagogy can contribute to students' mathematics identity development.

18:35-19:00

75643 | *Exploring the Landscape of Gamification in Higher Education: A Systematic Mapping Study*

Weiwei Zhang, Bond University, Australia

Amir Ghanbaripour, Bond University, Australia

Tsunemi Watanabe, Bond University, Australia

The concept of gamification is attracting significant attention and implementation in several industries. However, its use in higher education is still in its early phases. The use of game design aspects in non-game situations, sometimes called gamification, has emerged as a prominent trend in boosting learning experiences. This systematic mapping study investigates the utilisation of gamification in non-game contexts, specifically within higher education. By analysing peer-reviewed articles published between 2018 and 2022, the study explores various aspects, including the application of gamification, the variables under investigation, the game design elements employed, and the platforms utilised for implementation. This study focuses on the examination of the academic implications of incorporating game design components. It aims to identify and analyse this field's current patterns and future directions. The findings indicate that gamification is widely seen within Computer Science/Information Technology and Business domains in higher education. Majorly analysed variables include motivation, academic performance, and engagement. The research also highlights the increased use of gamification in online courses throughout the pandemic, emphasising its potential to enhance remote education experiences. Notably, platforms like Kahoot! have regularly shown favourable results in this area. This study comprehensively examines the current state and possibilities of gamification in higher education environments.

19:00-19:25

75986 | *Conversations for Insights: Generative AI's Role in Shaping Analytics Education*

Qizhang Liu, National University of Singapore, Singapore

The advent of generative AIs such as ChatGPT has brought a wave of disruption to all industries, education is not an exception. Educators world-wide have been actively discussing, brainstorming and experimenting short-term actions and long-term strategies to deal with the impact of generative AIs. Unfortunately, as generative AI is a relatively new technology, very few research papers are seen in literature talking about the effectiveness of such actions or strategies. In this paper, we present a series of changes made on an analytics course in the Business School of National University of Singapore, including redefining teaching objectives, changing teaching philosophy and changing assessment methods. Survey conducted on students showed positive feedback on such changes. Generative AIs help business students overcome the steep learning curve of programming and strengthen their confidence in using R to perform analytics tasks. Students could focus more on developing skills to understand data, address business concerns, and communicate analytics results. However, we also observed that students might over-rely on generative AI to solve problems they faced, thus lost their own judgement and analysis capabilities. A series of suggestions are proposed to avoid such AI traps.

09:00-10:40 | Room 604

# Thursday Onsite Presentation Session 1

Educational Policy, Leadership, Management & Administration

Session Chair: Ana Marie Matalines

09:00-09:25

75742 | *Stakeholder Engagement and Involvement Towards Child and Growth Development During Pandemic: A Framework on Correspondence Education*

Jathry Redondo, Phinma Saint Jude College, Philippines  
Ronald Catapang, National University (NU-Lipa), Philippines

The COVID-19 pandemic has significantly impacted children and adolescents' lives, leading to psychological problems and PTSD symptoms. In the Philippines, research on child and growth development during the pandemic is limited, emphasizing the need for better preparedness and quality education. The study investigated stakeholders' involvement in child growth and development during the pandemic, providing a framework for correspondence education. The study used mixed method from division of Manila schools using four point likert scale. A study using Urie Bronfenbrenner's ecological model found that stakeholders are involved in accessing online modules but less engaged in planning and development. They are highly involved with teachers but less engaged with Barangay assistance. Stakeholders are also involved in teacher assessment and feedback but less engaged with school heads. Modular distance learning is used, but parents face difficulties in integrating their child due to work and chores. Stakeholders' involvement is low, and school heads should involve stakeholders in planning and utilizing local government assistance for financially challenged families. Teachers should adapt best practices, communicate progress updates, and minimize activities, while parents should improve the learning environment and reduce distractions.

09:25-09:50

75112 | *Impacts of Education Reforms During Apartheid on Intergenerational Education Mobility in South Africa*

Yishan Shi, University College Dublin, Ireland

This paper used the National Income Dynamic Survey (NIDS), the first longitudinal analysis of socio-economic status which began in 2008 for South Africa, to investigate the causal effects of two important education policies on intergenerational education mobility, including the Education and Training Act implemented in 1979 for African population and the establish of House of Representatives (HOR) in 1984 for coloured population. First, I estimated the intergenerational educational mobility among Africans, Coloureds and Whites, using the standard ordinary least squares (OLS) regression model. I found that the patterns of intergenerational education mobility are different in three racial groups from 1948 to 1997. Both Africans and Coloureds population present an upward trend of education mobility, while the trend of intergenerational education mobility for white population through the last 50 years is quite stable. Second, I estimate the effect of two education reforms on intergenerational education persistence. The identification strategy relies on a difference-in-differences (DID) approach. The results indicate that the 1984 reform reduced the intergenerational education persistence by 0.3 for Coloureds population, but the intergenerational mobility increased before the 1979 reform for Africans population.

09:50-10:15

70847 | *Bridging the Urban-Rural Divide: Equitable and Accessible Education in India*

Jagritee Senapati, Inventure Academy, India

Bridging the rural-urban divide in a diverse country like India requires a multi-dimensional approach. Equitable and accessible education is one such key component to achieve this. This paper attempts to develop an understanding of the rural-urban divide primarily through the lens of the social development sector, focusing on primary and high school education in India. It explores the strategies, challenges and the road ahead for ensuring accessible school education referring to the National Education Policy (NEP 2020) implemented by the Indian Government and Article 21-A of the Indian Constitution which guarantees universal, free and compulsory education for children within the age group of 6-14. Despite this effort, the rural-urban divide in India is on a rise, having a severe effect on the overall development and growth of the country. Adding on, a survey conducted by the National Statistical Office (2017-2018) shows that there is a huge gap in the expenditure between urban and rural schools in India. Although development policies have been put into place to ensure an increment in student enrollment rates in rural India, much remains to be done in terms of overall infrastructure, quality of education, better accessibility to technology and the importance of community building. Based mostly on primary data, this paper dissects into multiple factors that are responsible for the divide and gives probable solutions to help bridge the gap. Some of the ideas explored are: gender sensitization, role of community building, public private partnerships (PPPs) and international partnerships in an increasingly globalized world.

10:15-10:40

70678 | *Asynchronous Distance Learning: Parents' Purview*

Jaya Babe Butas, Davao del Sur State College, Philippines  
Ana Marie Matalines, Davao del Sur State College, Philippines

The goal of the study was to explore the scope of parental participation in junior high school education, particularly in the asynchronous modality. Specifically, parents' perspectives, challenges, and contributions to children's education were probed. Using social constructivism as a worldview, the study employed a qualitative phenomenological research design. Research participants comprised ten parents of junior high school students who were purposely selected based on the inclusion criteria as well as the appropriate ethical protocols of consent, anonymity, and confidentiality. Key informant interviews were conducted in the first quarter of 2022 in Barangay Colorado, Digos City. Three themes that describe the parents' perceptions of the new normal education system were identified through thematic analysis of the qualitative data, including; saddening due to difficulty, requiring a positive attitude, and necessitating a positive change in attitude and mentality. The challenges faced by parents can be thematically described as; becoming passive, disinterest in studies, and constraints and limitations. Lastly, for the contributions given by the parents to their children's studies under asynchronous distance learning, the themes are; reinforcing extrinsic and intrinsic motivation, giving support, and constructing a support system. It is hoped that these findings may be relevant for DepEd's implementation of the self-learning modules.

10:55-12:35 | Room 604

# Thursday Onsite Presentation Session 2

Educational Policy, Leadership, Management & Administration

Session Chair: Yu-Ran Chen

10:55-11:20

74795 | *Contextual Leadership and Organizational Citizenship Behavior: The Moderating Role of the Followership Styles*

Kaili Fang, Wenzhou Kean University, China

Noman Mohammad, Wenzhou Kean University, China

This study examines whether followership styles moderate the relationship between contextual leadership (CL) and organizational citizenship behavior (OCB). Data was collected from 1121 teachers in China. Four models were tested by using compliant, active engaged, manipulative, and indifferent followership styles as the moderator, respectively. The moderating effect was tested by using Structural Equation Modeling (SEM) in AMOS. Specifically, the interaction term method was utilized. The results show that the compliant and the manipulative followership styles have a positive moderating effect on the relationship between contextual leadership and organizational citizenship behavior, while the indifferent followership style has a negative moderating effect. No moderating effect of the active engaged followership style was identified. Implications of the findings for theory, research, and practice are discussed.

11:20-11:45

75946 | *Assessment of 5S Sa Pamumuno: SDO Imus City School Leadership Approach*

Jenielyn Sadang, Schools Division Office of Imus City, Philippines

Ivan Honorpette Mijares, Schools Division Office of Imus City, Philippines

Purpose: The study aimed to assess the effectiveness of 5S (School-Based Management, School Improvement Plan, School Report Card, School Governing Council, and School Monitoring, Evaluation, and Adjustment) sa Pamumuno as a school leadership approach in the Schools Division Office of Imus City. Design/methodology/ approach: The study utilized the descriptive method of quantitative research. A modified questionnaire from the study of Costellow (2011), validated by experts, was utilized. Descriptive and inferential statistics were used to better analyze the data gathered. Frequency count, percentage, and weighted mean were utilized for the demographics, leadership qualification and skills and effectiveness of 5S sa Pamumuno as a variable. Privacy and confidentiality of data gathered from the selected respondents of the study was an utmost priority in this research. Findings: The study revealed that 5S sa Pamumuno was highly effective in all of the 5Ss of the Leadership Approach from the school heads' assessment while other respondents found some indicators in the School Governing Council as moderately effective. Research limitations/implications: The study showed that SDO Imus City school heads have shared vision as the main qualification and possess the personal, systems, and operations skills. Originality/value: The study is a first in the Division to look into the effectiveness of 5S sa Pamumuno as a school leadership approach.

11:45-12:10

74812 | *Impact of Leadership Styles on Subordinates' Job Satisfaction and Performance Within the British Royal Air Force*

Nabil Al Zahli, Military Technological College, Oman

Nowadays, the competition between organisations to achieve success is increasing and subordinates are the most important elements of success for any organisation. Success in this competition requires effective and satisfied subordinates. Additionally, leadership behaviour is a critical element affecting subordinates' satisfaction and performance. The aim of this study was to investigate the transformational and transactional leadership styles in the British Royal Air Force (RAF) and their impact on subordinates' job satisfaction and job performance. The study included 89 junior officers from the British RAF. According to the Pearson Correlation analysis, the results showed that transformational and transactional leadership were significantly correlated to subordinates' job satisfaction and job performance. Based on the results of the hypothesis testing using regression analysis, both transformational and transactional leadership had a positive impact on subordinates' job satisfaction and job performance. For future effective military performance, leaders should utilise the appropriate leadership behaviour in order to raise the bar of their subordinates' job satisfaction and performance.

12:10-12:35

74083 | *The Influences of Professional Collaboration of Teacher in Taiwan: Application of TALIS 2018 Junior High School Teacher's Database*

Yu-Ran Chen, National Tsing Hua University, Taiwan

Chuan-Chung Hsieh, National Tsing Hua University, Taiwan

Hui-Chieh Li, National Taipei University of Business, Taiwan

According to the Organization for Economic Co-operation and Development (OECD), professional collaboration is an important support for teachers working in challenging environments and has been identified as one of the five pillars of teacher professionalism. And some scholars have pointed out that professional collaboration among teachers is one of the important directions of the current education reform. In this study, a multi-level analysis was conducted using Hierarchical Linear Modeling (HLM) to examine the factors influencing teachers' professional collaboration. The study found that: 1) Teachers' self-efficacy did not have a significant effect on professional collaboration; 2) The higher teachers' awareness of teaching beliefs, the more willing they were to collaborate professionally; 3) Teachers' job satisfaction did not have a significant effect on professional collaboration; 4) Teachers' difficulty in collaborating professionally was due to busy work schedules, family responsibilities and lack of incentives; 5) The higher teachers' climate of innovation in teaching, the more willing they were to collaborate professionally; 6) The higher teachers' climate of innovation in teaching, the more willing they were to collaborate professionally; 7) Professional development activities had a negative impact on professional collaboration, as teachers were more likely to participate in their own independent qualification programmes (degree programmes). The study concludes with recommendations to facilitate and promote professional collaboration among teachers.

12:50-13:40 | Room 604

# Thursday Onsite Presentation Session 3

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

**Session Chair: Kaimuk Laosunthara**

**12:50-13:15**

74321 | *Digital Inclusion Through Innovative Library Management Systems in Digital Libraries: Literature Study*

Dyana Maftuhatu Rosyidah, Yogyakarta State University, Indonesia

Cepi Safruddin Abdul Jabar, Yogyakarta State University, Indonesia

Marvina Anan Dita, Yogyakarta State University, Indonesia

Roudhotul Fitria, Yogyakarta State University, Indonesia

Rio Sebastian, Yogyakarta State University, Indonesia

Aryadi Manuel Gultom, Yogyakarta State University, Indonesia

Library management systems in digital libraries can bring about innovation in digital inclusion, digital library users will find it easier to access reading materials anywhere and anytime, so the purpose of this study is to identify the effect of using a library management system in digital libraries on digital inclusion innovation. This research is the result of a synthesis of the findings of previous research articles that are relevant in the 2018-2022 period. This study adapted the Systematic Literature Review method with Publish or Perish software, then filtered and extracted the data according to the criteria for the research objectives so as to produce 54 relevant articles and compiled using the Prisma Protocol. From the results of several research syntheses, it was found that the use of library management systems in digital libraries is able to provide digital inclusion innovations, the topics in the articles obtained mostly explain the development of inclusive digital library management systems. Most of the systems used are user interface applications. In addition, the use of the library management system has a positive impact in the form of increasing inclusive services for users. Future research is expected to be able to present in detail the influence of the library management system on digital libraries to develop digital inclusion that is more friendly for persons with disabilities.

**13:15-13:40**

75989 | *The Development on a Board Game to Promote an Information Literacy for Upper Secondary Students at the Srinakharinwirot University Prasarnmit*

Kaimuk Laosunthara, Srinakharinwirot University Prasarnmit Demonstration School, Thailand

In today's information-rich landscape, cultivating effective information literacy skills is imperative for high school students. This study focuses on developing a board game as an innovative tool to enhance information literacy among students at Srinakharinwirot University Prasarnmit Demonstration School (Secondary). Learning can be more enjoyable when gamified, and this research aims to achieve just that. By creating a unique board game, akin to traditional tabletop games, the study aims to equip students with the ability to discern reliable information from dubious sources. The interactive game immerses players in diverse scenarios, prompting them to evaluate the credibility of information encountered. This puzzle-like experience nurtures critical thinking and analytical skills, thereby fostering improved information comprehension. It's essential to address copyright considerations as well. Similar to how authors hold rights to their books, game creators possess ownership of their creations. Thus, respecting copyright is crucial in how the game is utilized. To gauge the game's efficacy, selected students will participate, followed by interviews and assessments. This approach will determine if the game effectively enhances information literacy skills. This research contributes a dynamic learning method that not only engages but educates. By blending entertainment with education, this innovative approach empowers students to navigate the sea of information competently. Ultimately, the fusion of fun and learning may greatly contribute to students' cognitive development.

14:20-15:35 | Room 604

# Thursday Onsite Presentation Session 4

Education & Society: Human Capital Development

Session Chair: Narissara Charoenphandhu

14:20-14:45

74356 | *Integrating Entrepreneurship Education with the Philosophy of Sufficiency Economy for Primary School Administration Model*  
Khajornsak Buaraphan, Mahidol University, Thailand  
Patamawadee Srichana, Bannongmasaew School, Thailand

This study aimed to a) develop the primary school administration model by integrating Entrepreneurship Education with the Philosophy of Sufficiency Economy (EE-PSE); and b) examine the effects of EE-PSE model on teachers' competency in teaching by integrating EE-PSE. The research participants were three in-service teachers in one primary school under the Sisaket Primary Educational Service Area Office 1 and their students (n = 31). Five experts were asked to validate the quality of EE-PSE administration model regarding its Appropriateness, Correspondence, Practicality and Usefulness. After that, the EE-PSE model was employed and studied its effects on teachers' teaching competency. The mixed method was used in data collection. The participants were requested to respond to the EE-PSE conceptual test. In addition, the researchers observed the teachers' classroom practice and examined their EE-PSE lesson plans. The quantitative data was analyzed for mean and standard deviation (SD) and the qualitative data was analyzed by content analysis. The findings revealed that, in overall, the EE-PSE administration model had a high level of quality. The participants had well understanding about EE-PSE (82.50%). The lesson plans written by the participating teachers were qualified as a very high level (mean = 4.51, SD = 0.10) in integrating EE-PSE. In addition, the teachers expressed a high competency level (mean = 4.29, SD = 0.09) in teaching with EE-PSE.

14:45-15:10

73972 | *Empower Girls Creativity Through Use of Digital Technologies: A Learning Program for Girls*  
Inês Araújo, Polytechnic University of Tomar, Portugal  
Célio Gonçalo Marques, Polytechnic University of Tomar, Portugal  
Laura Grinevičiūtė, VIPT Asociacija, Lithuania  
Brigita Dane, Simbioza, Slovenia  
Renata Danielienė, Information Technologies Institute, Lithuania  
António Manso, Polytechnic University of Tomar, Portugal

Research shows that girls choose their professional future based on stereotypes, often under the family influence. The area of technology is the one where we find fewer girls, due to the lack of role models or examples of successful women. In response to this need, a group of partners involving universities and associations from Lithuania, Slovenia, Greece, and Portugal developed a project over two years. It started with a compilation of good practices and round table discussions with people who are relevant in the subject area in each country. With the data collected, it was possible to identify subjects and technologies to develop a learning program for girls. A program of 16 challenges was developed based on girls' interests that could be solved using technology. The Moodle platform was used to set up the whole structure. Each challenge includes theoretical information about the technology through video. Followed by tutorials where girls can learn how to use the tools. In the end, they must submit evidence of the challenge and fill in a quiz that tests their knowledge. A pilot test was then conducted with 279 girls from the four countries, aged between 14 and 18, for 2 months. The results were very positive, with the girls showing a change of view towards technology. All this experience made it possible to create a guidebook for mentors and organizations that work with girls, which will allow them to attract more girls to the area of technology.

15:10-15:35

74135 | *Human Capital Investment in Science and Technology Education and Development on Quality of Life in Thailand*  
Narissara Charoenphandhu, Rangsit University, Thailand  
Thoedsak Chomtohsuwan, Rangsit University, Thailand  
Shanisara Chamwong, Rangsit University, Thailand

Investment in education is a vital factor for development both individuals and the whole country. In Thailand, people have attempted to increase their human capital in terms of academic knowledge by studying in university as well as entering for higher education with expectation for higher wage and salary, and better quality of life. Thai government have implemented policies to improve equitable quality education and opportunity to access. Moreover, there are The National Education Plan 2017-2036 as ultimate goals to be achieved. In the Digital Economy era, science and technology majors have been important aspects to drive the country. Many students decided to study science and technology. This research uses primary data from questionnaire survey and secondary data from the National Statistical Office of Thailand to investigate the rate of return on studying in science and technology majors. The results showed that, in 2022, new graduates from science and technology fields earned high wage and salary comparing to poverty line and the minimum wage of Thailand. Most of them have a quality of life. However, high return comes with high duty as well. As analyzed, this study suggests that the Government should focus on education improvement for people and also quality of working life in the whole country to enhance quality of life and well-being.

16:15-17:55 | Room 604

# Thursday Onsite Presentation Session 5

Educational Policy, Leadership, Management & Administration

Session Chair: Jin-Fu Wu

16:15-16:40

73880 | *Mediation Effect of Quality Management on the Relationship Between Emotional Intelligence and Leadership Competency of Principals*

Siti Nazalia Kiprawi, University of Malaya, Malaysia

Emotional intelligence, quality management and competence are closely related to organizational effectiveness. Therefore, these three aspects are important and need to be considered so that a school-led organization will improve in all aspects. This study aims to identify the emotional intelligence of principals that is commonly practiced based on the Goleman-Noriah Model (2002) which presents seven dimensions namely self awareness, self-control, motivation, empathy, social awareness, maturity and spirituality. The study also examines the extent to which gender, age and experience background factors influence emotional intelligence as well as principal competencies. In addition, the study also describes the effect of emotional intelligence on principal leadership competencies in schools. The study was conducted in all secondary schools in Sarawak. The survey method using questionnaires is the main method of the study. A total of 152 principals as sampled for this study. Descriptive statistical analysis using SPSS 23.0 was used to analyze the level of emotional intelligence, quality management and principal competencies. Mann Whitney-U and Kruskal Wallis-H analysis of inference analysis was used to analyze the level differences based on demographics for the emotional intelligence, quality management and competence and to study the relationship of Spearman Rho analysis used. PLS SEM SMARTPLS 3.0 is used to study predictors for emotional intelligence constructs, as well as quality management as well as competencies and and to study the effects of quality management mediators and also to study model validity. The study found that principals have moderate emotional intelligence and high level of quality management.

16:40-17:05

74995 | *Unveiling the Filipino Executive Leadership Traits and Styles Among State Universities and Colleges (SUCs) in Eastern Visayas, Philippines*

Redentor Palencia, Samar State University, Philippines

An essential management task is leadership, which boosts productivity and aids in goal attainment. This study mainly analyzed the leadership traits and styles of the 402 executives (10 Presidents, 30 Vice-Presidents, 62 Deans, 26 Campus Directors, 96 Directors and 178 Heads) of the ten SUC in Eastern Visayas. The descriptive-qualitative technique was used as the method for this study. It utilized the Multifactor Leadership Questionnaire (MLQ 5X) and the Leadership Trait Questionnaire. The descriptive analysis used the Pearson-Product Moment Correlation Coefficient (Pearson r), Phi-Coefficient/Cramer's V, Eta Correlation, and One-Way Analysis of Variance (ANOVA). Along the qualitative dimension, one faculty and one support were considered per SUC to join the Focus Group Discussion (FGD). The FGD is analyzed through a content analysis using NVivo 10 Software. It utilized the word frequency query, word cloud analysis, and the cluster analysis horizontal dendrogram. The analysis presents the vision of these leaders for the institution like achieving quality administration to be a premier university in the country. It can be noted that these leaders as observed by the teachers and support staff practice organization and quality work to effect change in the institution. They consider their leaders as role models, referring to the person, because they introduce change through quality work. Analysis showed that the faculty and staff are involved on matters that require decision making. The study's implication will help administrators of educational institutions, as well as schools, SUCs, and other organizations in the Philippines, create a positive organizational culture.

17:05-17:30

75769 | *Science Mapping in Educational Leadership Research: Bibliometric Analysis, 1907 to 2022*

Runshan He, National Tsing Hua University, China

Educational leadership stands as a prominent research domain in education, where leaders play a guiding role, impacting educational culture and quality. With the pandemic of COVID-19 has compelled a shift to online learning for students, with educators striving to effectively engage learners in this digital landscape. Financial constraints have led to layoffs and cost-cutting in educational institutions, though some schools innovatively expanded. In response, educational institutions must forge fresh leadership strategies tailored to these unique challenges. This study utilized VOSviewer to investigate network diagrams relevant to educational leadership research. By categorizing clusters and analyzing their positional relationships, the study discerned attributes and connections within structured network diagrams, bolstering its argument. This study performed a bibliometric analysis of 8,489 papers published in the Scopus database from 1907 to 2022. Four key themes emerged: educational leadership as a catalyst for equity, inclusivity, and professional growth; educational leadership's intricate interplay with teacher development, student achievement, and school climate; The transformative impact of educational leadership in the COVID-19 era; Educational leadership is a key element in driving school improvement and development. Based on research findings, the post-COVID-19 era necessitates novel educational leadership styles, propelling teaching and learning, nurturing talent, and advancing educational objectives.

17:30-17:55

75555 | *Exploring the Effects of School Leadership, Teacher Collaboration on Teacher's Teaching Practice: Evidence Based on TALIS 2018 Taiwan Data*

Jin-Fu Wu, National Chung Hsing University, Taiwan

In terms of school leadership, school leadership may be perceived differently by principals and teachers, and it is an open question as to how these two different perceptions of school leadership, by principals or by teachers, affect teacher collaboration and teaching practice. The purpose of this study was to engage in secondary data analysis of the Teaching and Learning International Survey 2018 (TALIS 2018) Taiwan data (ISCED level 2: lower secondary education) to examine the impact of instructional leadership (principal-perceived), distributed leadership (principal-perceived and teacher-perceived), and teacher collaboration on teaching practice. Because TALIS 2018 is characterized by complex survey data, this study applied the IEA International Database Analyzer (IDB Analyzer) software for statistical analysis of complex survey data in order to obtain rigorous and credible research results. The findings of this study are as follows: 1. Instructional leadership as perceived by principals is significantly and positively correlated with distributed leadership as perceived by principals. Instructional leadership as perceived by principals is not significantly related to distributed leadership as perceived by teachers. Distributed leadership as perceived by principals is significantly and positively correlated with distributed leadership as perceived by teachers. 2. Instructional leadership as perceived by principals and distributed leadership as perceived by principals do not have significant predictive effects on teaching practice. Distributed leadership as perceived by teachers and teacher collaboration have significant positive predictive effects on teaching practice. In terms of the importance of influencing teaching practice, teacher collaboration has a higher predictive effect than teacher-perceived distributed leadership.

18:10-19:25 | Room 604

# Thursday Onsite Presentation Session 6

Higher Education

**Session Chair: Masahiro Inoue**

**18:10-18:35**

73274 | *Managing Scientific Research Activities at the University of Danang, Vietnam to Meet the University Quality Assessment Standards*  
Quang Giao Nguyen, The University of Danang, Vietnam  
Ngoc Thanh Huynh, The University of Danang, Vietnam

In Vietnam, education quality accreditation is compulsory and periodical at all levels, including university education. To implement education quality accreditation, in 2017, the Ministry of Education and Training (MOET) issued a set of standards for university quality assessment. This set of standards is based on that of ASEAN University Network (AUN). It is built up according to PDCA (Plan - Do - Check - Act) approach which requires universities and colleges to improve their quality. Besides, the set issued by MOET focuses on 3 main fields: training, scientific research and community service. Among 25 educational quality accreditation standards, there are 4 which are directed related to university scientific research. However, according to the results of accrediting, the activity of scientific research at The University of Danang (UD) still has a number of shortcomings and does not meet the demand of the standards. This journal investigates opinions by delivering questionnaire to 40 managing officers, 83 lecturers of 6 member universities of UD about the situation of scientific research management of UD to meet the set of standards. Accordingly, 6 measures have been proposed to promote scientific research activities of UD.

**18:35-19:00**

74765 | *Barriers to Faculty Engagement in Research in Engineering Education*  
Paramjit Kaur Tuls, NITTTR, India  
Parminder Walia, Sri Guru Gobind Singh College, India

A study was undertaken to identify the individual, organizational and social barriers to faculty engagement in research in engineering education. Descriptive research design (survey) was used to undertake the study. The sample for the study comprised of 550 faculty members working at different levels with varied years of experience. A questionnaire was used to collect the relevant data. Chi-square was calculated for each statement to find out the significant trend of agreement or disagreement with the statements Inadequate knowledge of research areas in engineering education and research methods; lack of familiarity with statistical techniques and software for data analysis to be used in engineering education research; misconception that problems faced by the society can only be solved through research in engineering and educational decisions can be easily taken by committees through discussion; too high cost of international journals in engineering education; undertaking research in one's own area of specialization is much easier and more satisfying than undertaking research in engineering education were perceived as individual barriers to undertaking research in engineering education. Perceived organizational barriers included: lack of encouragement from management, research in engineering education accorded less weightage in career development and heavy workload. Lack of support from seniors, lack of discussion among colleagues, non-seriousness on the part of students to provide data/information and difficulty in collecting data from industry were perceived as social barriers in undertaking research in engineering education. The paper also suggests measures to give impetus to research in engineering education.

**19:00-19:25**

73537 | *Project Management Education for Value Creation*  
Masahiro Inoue, Keio University, Japan  
Tomoko Maruyama, Ehime University, Japan

Project management is a fundamental knowledge and skill in the field academic domains including Business, IT, Health Sciences, and Engineering. Conventional project management has been based on a waterfall process to achieve deliverables while balancing the scope, schedule, and cost. Today, project management aims to not only obtain deliverables but achieve outcomes for value creation with sustainability. Furthermore, the project management process has become more diverse, including waterfall, agile, and a combination of them. The Project Management Body of Knowledge and the Standards have shifted from the methodologies defining detailed processes to the general principles. Project management education in universities should respond to value creation in diverse project models. However, the general principles are difficult to learn for students with limited practical project experience. Careful consideration should be given to designing project management educational programs. We researched the requirements for project management education for value creation in diverse processes and analyzed the gaps between recent demands and current project management education in universities. We propose a framework for project management education to achieve the learning outcomes for the program and allocate learning outcomes to projects, exercises, and lectures of project management education programs for value creation.

09:00-10:40 | Room 605

# Thursday Onsite Presentation Session 1

Interdisciplinary, Multidisciplinary & Transdisciplinary Education

Session Chair: Aki Yamada

09:00-09:25

75824 | *Infinite Saree: Cultural Threading Between Life Science and Mythology*  
Chandrasekaran S, Singapore University of Singapore & LASALLE College of the Arts, Singapore

Infinite Saree is a theatre production which was created through transdisciplinary practice and explored between Life Science, Visual Arts, Carnatic Music and Theru-Kootho(Folk Theatre). The paper will provide research methodologies that were engaged in exploring different streams of disciplines in creating Infinite Saree, and how they can be used as an educational tool in classroom teaching. The presentation of the paper is divided into three aspects. For the first aspect, I will be presenting three research principles such as systematic enquiry, scientific perspective and symbolic representations, and how they were used to interpret the inter-relationships between the different disciplines. With the second aspect, I will be introducing scientific and visual thinking as educational tools to teach transdisciplinary practice. Within this line of discourse, I will also be introducing the concept of *ஐக்கியம்* (Aikiyam) that will provide a platform for interpreting artistic practice through one's own cultural perspectives. The third aspect illustrates how we developed community arts education programs in collaboration with several artistic communities through workshops like Bio-Arts Workshop, Dance Workshop and Music Workshop. These collaborations contributed to the creation of DNA Saree and DNA Carnatic which were the first of its kind in South Indian Arts. The paper will conclude by addressing the importance of transdisciplinary teaching to be part of holistic learning in art education, and also, the significance of understanding one's artistic practice through cultural perspectives.

09:25-09:50

75089 | *School Leaders' Perception of STEAM as a Pedagogical Approach in School Education in Nepal*  
Basanta Lal Lamichhane, Kathmandu University, Nepal

STEAM education, in Nepal, is gaining momentum in school education for equipping all students to solve the challenges of today's world that are increasingly complex in nature. In the context of Nepal, the implementation of STEAM in school education is difficult for educators, teachers, and other stakeholders as it may require an understanding of the need for STEAM integration. Against this backdrop, the purpose of this study is to explore school leaders' perceptions of STEAM and its importance in education. A qualitative research design was preferred to conduct the narrative inquiry for knowing the perception of school leaders. This study has tried to explore different perceptions of school leaders regarding STEAM as an integrated approach to teaching and learning activities. Regular interaction with leaders, teachers, and other stakeholders helps to perceive the need for STEAM as a pedagogical approach in school-level education. However, they are alluring the need for regular support to school leaders and teachers for understanding and implementing STEAM in schools in Nepal. This study is useful to school leaders and educators for the implementation of the STEAM approach in school-level education. It is supportive to policymakers in education for the integration of STEAM in the curriculum as well. The recommendation of this study is to provide clues for further research and to expand and extend perceptions of school leaders for better understanding through workshops and training.

09:50-10:15

73927 | *Empowering Students as Active Citizens through Mathematics Education: Principles for Developing Engaging and Interdisciplinary Tasks*  
Angel Mae Ombid, Ateneo de Manila University, Philippines  
Dennis Lee Jarvis Ybañez, University of the Philippines Open University, Philippines  
Catherine Vistro-Yu, Ateneo de Manila University, Philippines

In this rapidly changing world, a growing concern for environmental sustainability (Barwell, 2020) has become one of the focal points for research, including mathematics education research. As we continue to navigate an increasingly volatile, uncertain, complex, and ambiguous (VUCA) world, we face new challenges. Taguma (2018) stressed that learners in the future need to exercise agency to actively participate in any activity directed towards the betterment of society. What better way for learners to acquire agency than through school mathematics curricula? However, given the designed tasks for school mathematics in the Philippines, learners remain ill-equipped to go beyond awareness of environmental issues. Through the Erasmus+ Project "Act as Youth Leader", the Modern Bahay Kubo Program was developed to encourage students to actively participate in the community through modern-day backyard farming. Using design science, mathematical tasks were developed and implemented to 48 Grade 7 students in CALABARZON Region, Philippines. Although the study showed encouraging results, several challenges have been identified and hence, five principles were formulated to guide mathematics teachers in developing tasks that would effectively enable students to become active, responsible, and engaged citizens. The five principles are: (1) Task design should take into account interdisciplinarity; (2) Implementation of the designed tasks should go beyond the school community; (3) Technology integration in the designed tasks should allow students to simulate tasks; (4) Designed tasks should be meaningful and not superficial or artificial; (5) Designed tasks should allow a seamless transition from a non-formal perspective to a more structured mathematical conception.

10:15-10:40

75104 | *Information Capital? Social Media as Information Capital for Developing Global Competencies*  
Aki Yamada, Tamagawa University, Japan

Today we live in an information society that is supported by the pervasive use of connected technologies that can spread a wide variety of information worldwide rapidly and with ease. With increased online presence and technological proficiency, physical location is becoming less relevant for today's virtually connected students. Higher education must adapt to this changing environment where students increasingly obtain international information through online social media platform content and social networks. This presentation examines this contemporary digital native generation and how they incorporate social media and networks into their learning processes. To study this phenomenon, we conducted a survey of 108 Japanese undergraduate students spanning all grade levels. This survey asked students how they view social media, its role in their learning processes, and how they engage with these applications. Our findings will discuss the information and technological skills needed to effectively use social media for personal development. This discussion will include the relevance of social media to stimulating students' global aspirations and interests. In the current digital era, such information-gathering skills and information capital are increasingly valuable, and we believe they can contribute to a new framework for developing global competencies in university education.

10:55-12:35 | Room 605

# Thursday Onsite Presentation Session 2

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Cara Luz Buar

10:55-11:20

72926 | *Appreciative Inquiry Approach and its Effects on English Oral Communication Skills of Teacher Education Students*  
Patricia Mariz Valencia, University of the Philippines Los Baños, Philippines  
Ruth Ortega-Dela Cruz, University of the Philippines Los Baños, Philippines

Good oral communication skills are necessary to help people understand and process information clearly. Pre-service teachers must be able to exemplify strong verbal ability to become globally competent amidst the education sector's fight to thrive amidst the COVID-19 crisis. With the aid of a "more nurturing" method that goes beyond physical presence, aspiring teachers could make a difference in their future students' learning experience. This study investigated the effects of the Appreciative Inquiry (AI) approach on the oral communication skills of Teacher Education students in a local college in Laguna, Philippines. A group of 11 student participants underwent a virtual intervention workshop series that followed the 4D cycle model of AI. The intervention was conducted via the Zoom Meetings app during the College's adaptation of a modular distance learning scheme in response to the pandemic. Results revealed a significant impact in the students' motivation to improve their oral communication skills. The sessions had a positive effect on their eagerness to proceed with specializing in English language education. Feedback from the post-intervention interview also suggested that the AI approach is a viable method for virtual classroom settings to build a safe learning space for students who engage in English, as the sessions give out a sense of fulfillment, positive reinforcement, and self-paced success. It is recommended that teachers employ AI techniques in their outcomes-based teaching-learning plans to sustain their students' motivation in pursuing Teacher Education and to support the students' varying needs and preferences based on the strengths they already possess.

11:20-11:45

73901 | *Integrating the Fully Online Learning Community Model with Digital Formative Assessment Tools and Student Response Systems in Teaching Geometric Optics*  
Judy Mae Castillo, University of San Carlos, Philippines  
Rolando Obiedo, University of San Carlos, Philippines

This study aims to investigate the effects of integrating the FOLC model with digital formative assessment tools and student response systems in teaching geometric optics. Based on a review of the literature on transactional distance theory, a lesson sequence on geometric optics was developed integrating the chosen digital tools Nearpod and Socrative. Using a mixed methods sequential explanatory design, grade 12 STEM students' levels of student engagement, online learning satisfaction, and perceived learning were measured before and after the intervention. Further, 10 students were asked to participate in post-test interviews to determine their experiences and what they consider the affordances and challenges of utilizing those in learning geometric optics. Analysis of the quantitative results indicated a statistically positive significant difference in student engagement mean scores, online satisfaction mean scores, and perceived learning mean scores. Moreover, the post-intervention interviews were analyzed using Braun & Clarke's (2006) Theoretical Analysis Framework, which revealed some affordances generated by the implementation such as the facilitation of the different features of Nearpod & Socrative in covering the lessons in geometric optics, the opportunity to share, collaborate ideas, as well as challenges, such as bandwidth requirements of using multiple apps, difficulty in multi-tasking, to name a few. According to the findings, using DFATs and SRSs in a fully online learning environment can potentially engage students for a better online learning experience, and the affordances outweigh the challenges.

11:45-12:10

76032 | *Online Learning Effectiveness as a Form of Critical Pedagogic Transformation Based on Early Childhood Education Parents' and Teachers' Perception*  
Della Jovanka, State University of Jakarta & Universitas Terbuka, Indonesia  
Yufiarti Yufiarti, State University of Jakarta, Indonesia  
Elindra Yetti, State University of Jakarta, Indonesia  
Sofia Hartati, State University of Jakarta, Indonesia

The role of both parents and teachers in their children's education has a significant impact on their ability to participate in school. Opportunities and challenges for teachers in learning as a type of transformative pedagogy, particularly in the post-pandemic period, are how teachers may be "present" and their presence is felt by students even when they are not face to face in class. This study aims to investigate parents' and teachers' perspectives on the usefulness of online learning for children during the pandemic as a crucial pedagogical innovation. The technique used in this study was an online questionnaire delivered via social media to 45 teachers aged 23 to above 40 years and 51 parents aged 26 to above 40 years. Cronbach-alpha was used to assess instrument validity and reliability. According to the study, parents and teachers believe face-to-face learning is more effective than online learning, saves time, and reduces monthly costs. They also need to see the benefits of online learning because it does not measure children's competencies about learning objectives. This situation is due to teachers' and parents' digital literacy needs. As many as 58% of parents and 60% of teachers indicate that they experience difficulty accessing the internet. The study's implications are to increase the quality of online learning, beginning with enhancing instructors' digital competency and giving ICT training, despite the fact that the learning has now returned to face-to-face.

12:10-12:35

73862 | *Teaching Work-Energy-Power Using the 4MAT Teaching Model Integrating PhET Simulations: Effects on Students' Conceptual Understanding and Motivation*  
Cara Luz Buar, University of San Carlos, Philippines  
Rolando Obiedo, University of San Carlos, Philippines

This study evaluated the effects of utilizing a researcher-developed instructional material based on integrating PhET simulations to 4MAT (4 Modes Application Technique) teaching model on the conceptual understanding and motivation of students in Work-Energy-Power (WEP), through an online class setting. Sequential explanatory design was used where quantitative and qualitative data gathering and analysis methods were utilized. Quasi-experimental design was employed where intact classes were assigned as control group and experimental group. A conceptual test questionnaire in WEP and RIMMS questionnaire were adopted to measure students' conceptual understanding and motivation. Pre-test and post-test were administered to both groups. The test results were compared using T-test for dependent samples (within groups) and T-test for independent samples (between groups). Participants were interviewed about their experiences on using the simulations. Results showed that both groups' conceptual understanding have improved but the experimental group's post-test mean score is significantly higher, ( $p < 0.001$ ). Cohen's effect size value ( $d = 1.96$ ) is large which means that the intervention greatly affects students' conceptual understanding. Furthermore, the experimental group's motivation is significantly higher based on students' attention, relevance, confidence, and satisfaction ( $p < 0.001$ ) scores. Effect sizes in all four attributes are large. The experiences that were reported by the students when using the PhET sims include the themes; conceptual understanding, motivation, retention, and instructional support. It is concluded that the 4MAT teaching model integrating PhET simulations improves students' conceptual understanding and motivation. Also, students' experiences suggest that PhET sims enhances retention, and instructional support is important in extending the effectiveness of the simulations.

12:50-13:40 | Room 605

# Thursday Onsite Presentation Session 3

Primary & Secondary Education

Session Chair: TBA

12:50-13:15

73459 | *Overcoming Adversity in STEM Education: The Scientist-Teacher-Student Partnership as an Approach in Teaching Integrated STEM*

Hidayah Mohd Fadzil, Universiti Malaya, Malaysia

Rohaida Mohd Saat, Universiti Malaya, Malaysia

In recent years, the number of students who enroll in the STEM stream and opt for STEM careers has been deteriorating. Soon, Malaysia will be in a great predicament due to the insufficiency of STEM workers, which can impede a sturdy nation's development. This distressing situation called for collective efforts among STEM personnel to reexamine classroom practices. Scientist-Teacher-Student Partnership (STSP) is an innovative approach focusing on a tripartite collaboration among scientists, science teachers, and students to deliver more integrated and student-driven science subjects. The partnership provides an avenue for the partners to learn from each other and 'team up' in developing instructional practices that best advocate meaningful learning, interest, and STEM skills among students to overcome adversity in enhancing the quality of the implementation of STEM subjects. The study began in 2017, involving scientists and teachers from three science fields i.e. Biology, Physics and Chemistry. The study focused on developing a model for enhancing science learning. Data were collected through semi-structured interviews with 125 students, nine teachers, and ten scientists. Using the constant comparative data analysis technique, the grounded model of STSP emerged from the data, which consisted of four main themes: collaboration factors, internal factors, institutional factors, and external factors. The findings show that the STSP approach can enhance students' interest in STEM education.

13:15-13:40

73694 | *Usefulness of Various Measurements of Gravitational Acceleration for Improving Secondary Physics Education*

Mohammad Salim Hakimzai, Naruto University of Education, Japan

Kazunari Sugimoto, Naruto University of Education, Japan

Yukio Terashima, Naruto University of Education, Japan

This study conducted a comparative analysis of how the gravitational acceleration ( $g$ ) is measured in secondary physics by using different experiments. Gravity is a basic concept in physics, and accurate measurements of  $g$  are necessary. We analyzed the concept of  $g$  used at secondary level of schools with regards to definitions, formula derivations and measurements methods. Comprehensive analysis with four types of experiments revealed that both simple pendulum and free-falling objects was useful not only for measuring the value of  $g$  easily but also for elucidating the significance of  $g$  theoretically and experimentally. Although, the formula and experimental methods to obtain the  $g$  value differ among these four methods, reasonable values of  $g$  were measured. Each method was found to have both advantages and disadvantages in terms of difficulty and interest for students to learn about the gravity with experiments. These results can help learners' engagement in hands-on activities in the classroom and exacerbate their interest to measure the value of  $g$  practically which defines the falling objects attracted by the earth's gravity force. Moreover, it can encourage and motivate teachers and curriculum developers to utilize various teaching methods for improvement of learners' physics concepts.

14:20-16:00 | Room 605

# Thursday Onsite Presentation Session 4

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Brigitte Lenong

14:20-14:45

73188 | *Challenges and Recommendations to Champion Breastfeeding Teachers in Albay*

Christine Grace Azul, University of Santo Tomas-Legazpi, Philippines

In today's modern world, it is equally significant for the mothers to nurse their babies and pursue their jobs. However, working mothers specifically teachers face initial challenges when they chose to breastfeed and return to work. In the Philippines, Republic Act No. 10028 (2009) otherwise known as Expanded Breastfeeding Promotion was implemented to support breastfeeding employees through establishment of lactation area and practice of 40-minute lactation period at work. However, not all workplace is implementing the law. This research was a mixed qualitative and quantitative type of study. A quantitative approach through a survey questionnaire using a five-point Likert scale assessed the challenges faced by the 15 mothers who continued breastfeeding their babies after their maternity leave in Albay. A qualitative approach deepened the understanding of these challenges to come up with proposed recommendations through open-response questions in the survey. Descriptive statistics and qualitative content analysis were utilized to analyze the data. Two main challenges were identified in the workplace: lack of time (2.67) and lack of lactation area (2.93). Most breastfeeding teachers experienced inflexible working schedule and inaccessible lactation area in schools. Despite the challenges, they were supported by their co-teachers (4.33) and supervisors (3.67) by covering their duties and giving them constant moral support. The Department of Education (DepEd) with the help of school supervisors must monitor the implementation of flexible work schedule, improvised lactation area, and inclusive guidelines in schools to fully create a supportive working environment for the breastfeeding teachers.

14:45-15:10

76043 | *Navigating Teaching Practice: Insights From Pre-service Commerce Teachers in South Africa*

Abelwe Maluleka, University of Johannesburg, South Africa

Rhulani Maluleka, University of Johannesburg, South Africa

Teaching Practice (TP) stands as a cornerstone of South Africa's Initial Teacher Education (ITE), bringing together academic theory and real-world classroom application (Department of Higher Education & Training, 2015). This experiential process bridges theory and practice, nurturing vital teaching skills. Anchored in policy frameworks, TP fosters confident and competent educators. Scholars recognise its role in honing various skills, from lesson planning to professional development (Bamrungsin & Khampirat, 2022), (Ndebele & Legg-Jack, 2022), though challenges can compromise its quality, necessitating robust planning and support (Van Niekerk, 2018). Our study investigates the experiences of Business Studies and Economics pre-service teachers during TP, exploring their journeys, challenges, and outcomes. Employing a phenomenological qualitative approach, we uncover participants' lived realities. Data was obtained through self-reported questionnaires from 30 pre-service commerce teachers. The study found that a mentor-teacher support program was crucial to the student-teachers' teaching practice experiences. Most respondents expressed positive sentiments regarding their mentor teachers' guidance, constructive feedback, and availability for questions. Mentor teachers were seen as instrumental in providing opportunities for observing effective teaching practices, honing classroom management skills, and sharing valuable teaching resources. However, there were also instances where they desired more support in large classroom management, learner behaviour, and discipline. Suggestions encompass heightened mentor engagement, precise communication, administrative orientation, and resource provisioning. While mentor-teacher support holds value, refinement is necessary for holistic pre-service teacher education.

15:10-15:35

73930 | *Navigating Stormy Seas: Techniques for Teaching Contentious Topics in Political Science Programmes*

James Kaizuka, University of Leeds, United Kingdom

Sara Kaizuka, University of Leeds, United Kingdom

In increasingly polarized political contexts, exacerbated by concerns over student safety, mental health, and media hysteria over "safe spaces" and "cancel culture", teaching contentious political science topics has become more challenging than ever before. At the same time, students do not enter as blank slates on these topics and are likely to bring their own ideas – sometimes vociferously – into the classroom. Political science topics can be inherently binary, they can carry a high risk of pre-existing biases among participants, and they can be tense and uncomfortable to discuss. Under such circumstances, how can course tutors ensure that all perspectives on a given topic are adequately addressed while ensuring that discussions are held in a respectful and collegiate manner? In this paper, we offer reflective accounts of our own experiences of political science teaching in two particularly contentious areas in the UK higher education context – nuclear weapons and Brexit – where all of these risks are high. The paper offers three techniques for overcoming tension and ensuring that the topics are covered in a balanced manner to foster good faith discussion and debate. We emphasize the use of counter-balancing case studies which challenge existing biases, the "weaponization" of expected pre-existing biases to provoke critique, and the use of humor to create a positive, open and free learning environment. We conclude that the use of these techniques can be helpful in teaching contentious topics – helping practitioners to navigate the "stormy seas" of today's challenging political science teaching context.

15:35-16:00

75046 | *Is Co-teaching a Sustainable Practice in Teacher Education? The Perception of Lecturers in Higher Education*

Brigitte Lenong, Central University of Technology, South Africa

The goal of sustainability is to improve human well-being and quality of life, but the definition of sustainability may depend on context. The core of higher education is to enable academic staff to implement education that is sustainable. Therefore, ensuring sustainability in co-teaching may require providing each lecturer with the skills, knowledge, and attitudes needed to collaborate. Co-teaching is a teaching strategy in which lecturers collaborate to learn from one another's knowledge and expertise while influencing the education environment. The problem is that lecturers in higher education often collaborate in research but seldom collaborate in teaching and learning. This mixed method study investigated lecturers' experiences of co-teaching, and the strategies the lecturers have devised to promote and sustain co-teaching. The participants were 12 lecturers involved in the teaching of compulsory Educational Foundations modules at an institution of higher learning in South Africa. The findings reveal that sustainability of co-teaching at an institution of higher learning means empowering every lecturer involved in collaborative co-teaching through promoting social equity and democratic values. Although co-teaching is practiced at institutions of higher learning, it is suggested that more training on co-teaching is developed, to enable academic staff to build a sustainable future for collaborative learning settings.

16:15-17:55 | Room 605

# Thursday Onsite Presentation Session 5

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Sitthiwat Saripan

16:15-16:40

71476 | *A Case Study of the Use of Inquiry-Based Learning (IBL) in Singapore History Classrooms*

Valerie Shu Hsien Keh, Ministry of Education Singapore, Singapore

Noel Tiong Puay Ong, Ministry of Education Singapore, Singapore

Inquiry-based learning (IBL) engenders active involvement of students in constructing new knowledge through the process of deepening learning, gaining global traction amongst educational systems and educators. Yet, despite curriculum resources supporting the enactment of IBL in Singapore history classrooms since 2013 coupled with professional development training provided for most History teachers prior to and during the implementation of the respective syllabuses, the use of IBL remains uneven and inconsistent in History classrooms because of perceived curriculum time constraints and teacher beliefs. As the use of IBL specifically in History classrooms is relatively unexplored, this study postulated 2 research questions: a) How is inquiry-based learning (IBL) enacted in the Secondary History classrooms and b) What are the enablers and impediments to the use of IBL these classrooms? A qualitative case study approach using semi-structured interviews and classroom observations as the primary data collection instrument was employed. Using Dedoose, data was analysed using thematic analysis and a combination of inductive and deductive approaches. Findings showed strong teacher belief in inquiry as a key pedagogy in the history classroom. However, they still relied largely on didactic teaching despite planning and designing their lessons around inquiry. The findings provided clarity on the nature of struggles faced in implementing, and their roles in mitigating some of these challenges confronting them. These findings could also inform the design of instructional materials such as teaching and learning guides and professional development workshops to better support teachers in their use of IBL in the History classrooms.

16:40-17:05

73268 | *Problem Solving Learning with Drawing a Diagram Strategy to Improve Mathematical Reflective Thinking Skills*

Yusuf Sodhiqin, Yogyakarta State University, Indonesia

Haryanto, Yogyakarta State University, Indonesia

Abdul Muin, Islam State University of Jakarta, Indonesia

The purpose of this research was to analyze the increase of mathematical reflective thinking skills among students taught by problem-solving learning with drawing a diagram strategy from students who are taught by conventional learning with an expository method. The research method used is a quasi-experiment with a randomized posttest given to the control group design. To take samples, the researcher used cluster random sampling by taking two of the eight classes, one class as a class experiment and the other class as a control class. The result of this research showed that students' mathematical reflective thinking skills who are taught problem-solving learning with drawing a diagram strategy overall are higher than students who are taught by conventional learning with an expository method. Specifically, this research showed that problem-solving learning with drawing a diagram strategy indicated a huge increase on the evaluation indicator compared with the other indicators.

17:05-17:30

76063 | *An Analysis of Students' Mathematical Thinking Through Task Sequence on Division in Classroom Using Open Approach*

Sitthiwat Saripan, Khon Kaen University, Thailand

Narumon Changsri, Khon Kaen University, Thailand

Maitree Inprasitha, Khon Kaen University, Thailand

The purpose of this research aimed to analyze students' mathematical thinking that occurred in task sequence on division. The participants were 9 students in grade 4. The research methodology was qualitative method based on Lesson Study processes: collaboratively plan 5 research lessons, collaboratively do with include 4 steps of Open Approach: 1) posing open-ended problems, 2) students' self-learning, 3) whole-class discussion and comparison, and 4) summarizing by connecting students' mathematical ideas. Finally process was collaboratively reflection after lesson. Data collected from students' worksheet, textbook, and field note. Data analyzed by using conceptual framework of Mangao, Ahmad, and Isoda (2017). The results showed that students' mathematical thinking occurred in order of task sequence on division from all 4 characteristics which were 1) The specification of the tasks allowed students to discover the rules of division by seeing the relations of the symbolic sentences generated from the tasks, 2) The generalization of tasks prompted students to generalize the relations of division rules discovered in tasks with specificity, 3) The extension of the tasks allowed students to apply division rules to expand learning to solve division tasks of tens and hundreds, and 4) The integration allowed students to integrate the rules of division and also the division of tens and hundreds in order to solve the division of large numbers.

17:30-17:55

74478 | *Problems and Needs in Experiential Learning in Mathematics: Teachers' and Students' Perspectives From Thailand*

Khajornsak Buaraphan, Mahidol University, Thailand

Sopapun Thongkum, Narathiwat School, Thailand

This study aimed to explore the teachers' and students' perspectives of problems and needs in Experiential Learning (EL) in Mathematics at secondary education. 31 teachers and 35 grade 11 students from Narathiwat province, Thailand, responded to the questionnaire, which was analyzed for mean and standard deviation (SD). Overall, mathematics teachers had moderate level of problems in EL (mean = 3.21, SD = 0.49). The three major EL problems were: students have not yet developed satisfied metacognitive thinking (mean = 3.65, SD = 0.61), academic achievement (mean = 3.48, SD = 0.77) and mathematical process skills (mean = 3.42, SD = 0.72). Overall, teachers had a high level of needs in EL (mean = 3.98, SD = 0.69). Three major needs were: developing technology skills in EL (mean = 4.16, SD = 0.638), awareness of EL (mean = 4.13, SD = 0.89), and readiness for implementing EL (mean = 4.10, SD = 0.79). The students, overall, had moderate problems of EL (mean = 3.33, SD = 0.58). Three major problems were: 1) students have not yet developed satisfied metacognition (mean = 3.80, SD = 0.83), mathematical process skills (mean = 3.80, SD = 0.99), and academic achievement (mean = 3.77, SD = 1.03). Students had the highest level of needs in EL (mean = 4.24, SD = 0.68). Three major needs were: developing mathematical process skills (mean = 4.49, SD = 0.74), academic achievement (mean = 4.43, SD = 0.70), and readiness for EL (mean = 4.29, SD = 0.67)

18:10-19:25 | Room 605

# Thursday Onsite Presentation Session 6

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Liu Shu-ying

18:10-18:35

75938 | *The Impact of Online Piano Coaching Platforms on Piano Teaching – A Interview from Teachers' and Parents' Perspectives*  
Shuchen Wang, Mahidol University, Thailand  
Ni-on Tayrattanachai, Mahidol University, Thailand

Online piano coaching platform is a collective term for piano teaching software rooted in mobile smart terminals. It has been widely used in recent years, especially during COVID-19 epidemics. Its market response has been favorable and a large number of similar apps have emerged rapidly. At the same time, many piano education practitioners remain skeptical of the impact they have had, believing that such products have not improved actual offline classroom teaching and overall piano playing ability. The researcher interviews parents to find out their real expectations and needs and to explore the role of online piano coaching platform in their children's piano learning process. At the same time research will also interview piano teachers about their views on online piano coaching platform and its role in assisting piano playing ability and offline classes. The interview will find out the limitations of the use of online piano coaching platform at this stage, its impact on the students, the difference between the effectiveness of online and offline coaching, and an efficient model of coaching from the piano teacher's point of view. The aim of this study is to build a bridge to more closely link market demand and offline teaching to ensure that online piano coaching platforms can truly meet educational needs and maximize the improvement on the process of students' piano learning.

18:35-19:00

75712 | *The Mapping of Music Teachers' Experience: From Teaching Music to Developing Socio-emotional Skills at Music School*  
Ilona Tandzegolskiene-Bielaglove, Vytautas Magnus University, Lithuania  
Nijole Ciuciulkiene, Vytautas Magnus University, Lithuania  
Raimonda Kurauskiene, Vilkaviskio Music School, Lithuania

Traditionally musical education is regarded as preparing musically gifted children for the profession of a musician. The holistic personal development including socio-emotional skills is often ignored. For this reason, the researchers aim to map the experience of music teachers of non-formal education institutions (music school) in the areas of socio-emotional skills development. Relying on the theoretical literature analysis, the in-depth interview questions were prepared for teachers while following the CASEL model of systematic socio-emotional education at school. 10 music school teachers participated in the study. The findings were analyzed using qualitative thematic analysis, highlighting the main themes, and looking for connections between themes and sub-themes. Research results revealed 6 main themes: from the possibilities of personality formation in the music school; recognition and regulation of emotions in musical education; ability to set and implement educational goals; the importance of following the rules and agreements; creating mutual relations to responsible decisions making while studying at a music school. The content of the mapping results demonstrated the increasing emphasis on the importance of the influence of musical education on the socio-emotional maturation of a person. It became clear that teachers have every opportunity to encourage children to recognize emotions and, after naming them, offer students various ways of regulating emotions. However, it is worth to note that during the lessons major focus is centered around learning the musical piece. Self-regulation methods, centered around the development of socio-emotional skills come to attention mainly before the concerts, without stressing them during each lesson.

19:00-19:25

73111 | *Using Puppet Theatre to Shape the Storytelling Skills of Early Childhood Education Teacher Trainees*  
Liu Shu-Ying, National Tsing Hua University, Taiwan

While able to read stories, student teachers typically have little understanding of how to enhance their storytelling skills, and thus the experience of children, using props and other objects. This paper focuses on how that can be addressed by using puppet theatre to nurture Early Childhood Education teacher trainees' storytelling skills. The participants in the research were 30 third-year Early Childhood Education BA students. The research was conducted largely in-person in real-classroom settings, although it was also partly online due to Covid-19 restrictions. An action research methodology was used. Research activities included creative tasks to give students first-hand experience of performing arts; using picture books and adaptations to develop students' audio-visual and kinesthetic sensitivities, and enhance their expression and storytelling; and using object representations to activate the imagination and subsequently create object puppet scenes, recorded as online videos. Data collected included photographs, video, and records of participant observation conversations. All was reflected upon; analyzed and triangulated. Additionally, other professionals were invited to give feedback. From the results, I conclude that exploring diverse artistic elements helps enhance student-teachers' perception and understanding of the benefits of drama for young children. In particular, it shows that the use of puppet theatre can strengthen students' knowledge and application of aesthetic and art-related skills. It furthermore demonstrates that teaching that links auditory, visual and kinesthetic creativity can cultivate a diversity of artistic perspectives and teaching strategies that assist the development of student-teachers' storytelling skills, and thus the learning of the children in their classes.

09:00-10:40 | Room 607

# Thursday Onsite Presentation Session 1

Learning Experiences, Student Learning & Learner Diversity

**Session Chair: Tanes Tanitteerapan**

**09:00-09:25**

73713 | *Student Learning in an International Exchange Program: Developing Skills for a Globalized World*

Hirano Ayako, Kyoto Sangyo University, Japan

Buddhika Kanduboda, Ritsumeikan University, Japan

This research discusses what students who participated in an English presentation competition felt they had acquired. Fifteen university students from two universities in the Kansai region participated in the World Youth Meeting (WYM), a collaborative English presentation event for Asian students. They worked online with Taiwanese students for about four months to prepare for WYM. The research questions are (1) whether WYM participants feel that they developed their "Fundamental Competencies for Working Persons" (FCFWP) as defined by the Japanese Ministry of Economy and Trade and Industry, (2) whether WYM participants feel that their "English proficiency" has improved, (3) what difficulties WYM participants experienced, and whether their English proficiency levels affect these difficulties, and (4) what WYM participants feel they have learned from the WYM initiative. To answer these questions, we conducted a questionnaire survey and analyzed the data. The results revealed that students felt their competency improved in all areas of the FCFWP except "discipline" and that their English speaking and listening skills had improved. They did not feel that their English writing and reading skills had improved. In addition, the difficulties they experienced differed slightly depending on their level of English proficiency. Furthermore, students felt that they learned English expressions, presentation methods, research methods, teamwork, cross-cultural understanding, and the importance of leadership through WYM. In the presentation, based on the results of this study, we will propose points to be noted and measures for improvement when engaging in international collaborative activity in the future.

**09:25-09:50**

75768 | *A Qualitative Perspective on Student Teachers' Experiences of Social Science Teaching and Learning in South African Multicultural Classrooms*

Titus Williams, Central University of Technology Freestate, South Africa

This qualitative study is an investigation of final years Social Science education students' perceptions of Social Science teaching and learning in South African multicultural classrooms. The current South African schooling landscape is of a multicultural setting, where learners from different racial, ethnic, cultural, and socio-economic backgrounds are admitted. This study seeks to ascertain the perceptions of student teacher's engagement with diverse learners in Social Science multicultural classroom and the influence it has on the teaching and learning project. Through a qualitative research methodology, data was gathered from Focus Group Discussion (FGD) sessions with three groups of five teacher education students from the same race, in their final year, specializing in Social Science teaching. The results of the study indicate that student teachers find the teaching of Social Science in a multicultural classroom very challenging, irrespective of their race, culture, or social-economic background. The study therefore recommends regular exposure to diverse learners through mandatory teaching practice at multicultural schools, appropriate training, and development throughout the students' teacher training with supported policies and integration of social justice into the curriculum content.

**09:50-10:15**

73900 | *Using Empathy Tools to Facilitate Universal Design for Learning: A Case Study to Illustrate and Advance Theory into Practice*

Tulio Maximo, The Hong Kong Polytechnic University, Hong Kong

Angel Lee, The Hong Kong Polytechnic University, Hong Kong

The Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning by accommodating a diversity of students' needs. Based on scientific insights into how humans learn, the UDL framework encourages educators to motivate their students to learn in different ways, by removing barriers in learning to accommodate the diversity of learners and nurture the potential of individuals. It consists of three domains named engagement, representation and action and expression. In design practice, is common to use empathy tools such as personas and wearable simulators to empathize with populations often excluded from mainstream design, such as people with disabilities and the senior population. This case study aims to i) evaluate how the UDL framework was applied in an inclusive design elective of the Bachelor in Arts course of a Product Design programme in Hong Kong, ii) evaluate how empathy tools such as persona and wearable simulators facilitate the application of the UDL guidelines iii) exemplify the application of the UDL guidelines in a single class, iv) Identify gaps and opportunities for future improvements of applying UDL into the higher education. The results show that the use of persona and wearable simulators has proven effective in applying the UDL guidelines in all three domains. Future studies will focus on developing persona profiles specific to higher education and focused on the Asian population, considering that most evidence-based available persona profiles are designed or market-oriented and representative of the Western population.

**10:15-10:40**

73917 | *Design of Challenge Based Learning Module for Developing Social and Digital Skills of Vocational Education Students in Thailand*

Tanes Tanitteerapan, King Mongkut's University of Technology Thonburi, Thailand

Sorakrich Maneewan, King Mongkut's University of Technology Thonburi, Thailand

Sakesun Yampinij, King Mongkut's University of Technology Thonburi, Thailand

A Design of learning module to achieve social skill and digital skill of students in vocational education system in Thailand has been introduced. The module included online lessons for self-learning and onsite activities following process of Challenge based Learning (CBL) that classify as 3 processes as engage process, investigate process, and act process. The online lessons were designed as Definition of community, Digital wellness, Digital content creation with smartphone, Online marketing, Challenge based Learning Details, and Project Accomplishment. Students learnt these lessons before access to activities in CBL process. The students were grouped and assigned to get the project theme from the community and investigate how to apply knowledge and vocational skills to assist the community. The CBL process was utilized as project framework that students would get the project theme from engage process, get the project procedures from investigate process, and get project accomplishment from act process. To ensure the effectiveness and efficiency of the learning process, an on-site mechanism has been developed to meet, support, and monitor CBL learning activities for 533 students from vocational colleges in Thailand. The students were grouped as A,B,C,D,E, and F to create the projects and all projects were designed for presenting the results through 3 minutes of digital clips. The results indicate that the students have received enhanced experiences including skills in critical thinking, emotional intelligence, social skills, social responsibility, readiness for change, and various preparedness and adaptability to changes.

10:55-12:35 | Room 607

# Thursday Onsite Presentation Session 2

Learning Experiences, Student Learning & Learner Diversity

**Session Chair: Peik-Foong Yeap**

10:55-11:20

73037 | *Scaffolding for Supporting Self-regulation in Online Learning*

Siew Lee Teng, Academy of Singapore Teachers, Singapore

While equipping digital literacy is crucial for students to navigate online materials, increasing student agency is an important educational goal in the future of learning (OECD, 2018). This study explored using scaffolding to design online learning experiences and support self-regulated learning. An online course was developed for student self-study on solving Chemistry data-analysis questions. The learning packages were designed incorporating different types of scaffolding and strategies to support self-regulated learning, leveraging on the features in the Student Learning Space (SLS) online learning portal. The study was conducted in six secondary schools in Singapore in three cycles. Data were collected from analysis of students' work responses on the SLS online portal, pre- and post-test results, and a survey. Findings showed that students were highly responsive to the online learning experiences which led to enhanced performance on data-analysis items. In addition, findings provided insights into the implications for supporting self-regulated learning when engaging secondary school students in online learning.

11:20-11:45

74739 | *Online Student Engagement and Mathematics Performance in the Learning Management System: A Path Analysis*

Geraldine Abella, University of St. Lasalle, Philippines

Chard Aye Alova, University of St. La Salle, Philippines

Jan Raymund Tirado, University of St. La Salle, Philippines

Mark Xavier Guanzon, University of St. La Salle, Philippines

The main objective of the study was to explore the relationships between students' learning management system analytics, online engagement, and mathematics performance. The study utilized a causal quantitative research design employing path analysis to find the indirect and direct effects of students' learning management analytics and the mediating role of online engagement in mathematics performance. A total of 835 freshmen students participated in the study. Students' analytics were evaluated using their number of participation and number of page views in a specific course in mathematics. Students across sexes and colleges have a high level of online engagement in terms of cognitive, behavioral, and psychological aspects. While students' mathematics performance across sexes and colleges is interpreted as very good, The mediating role of online engagement between students' analytics and mathematics performance was investigated using path analysis. Results revealed that psychological engagement is a mediating factor between the number of participation and Math Performance. The findings further show partial mediation since the number of participation and page views also showed significant direct effects on online engagements and mathematics performance. The study concludes that students with higher participation in learning management systems are associated with higher online engagement. It is recommended that intervention strategies be incorporated into online course design to reinforce students' positive psychological engagement, such as providing meaningful and inspiring activities accompanied by instructors' guidance and feedback. This is because this study has shown that psychological engagement plays a significant mediating role between learning analytics and mathematics performance.

11:45-12:10

75140 | *Assessing the Learners' Perception on the Integration the Remote Learning and Work-Integrated Learning Application*

Aziatul Waznah Ghazali, Universiti Kebangsaan Malaysia, Malaysia

Nur Aima Shafie, Universiti Teknologi Mara, Malaysia

Soliha Sanusi, Universiti Kebangsaan Malaysia, Malaysia

Mara Ridhuan Che Abdul Rahman, Universiti Kebangsaan Malaysia, Malaysia

Digital disruption has led to have reshaped existing business models and facilitated the emergence of new ones wherein repetitive and mundane tasks are becoming less important and the need for high-level skills is increasing. Therefore, accounting graduates requires a new set of aptitudes, over and above basic technical accounting knowledge, which includes digital literacy, problem-solving, leadership, critical and analytical thinking, creativity and innovation, originality and initiative, customer service, and conflict management. The current industrial demanded for accounting educators in higher education institutions (HEIs) to refresh the curriculum to better meet evolving labour market demands, such as through innovative forms of work-integrated learning (WIL). Therefore, the current study investigates the impact of remote learning concept and online WIL for accounting education in a higher education setting. An online focus group interview are conducted with students of public higher education institutions in Malaysia to capture their perceptions on the quality and adequacy of the integration of remote learning and online WIL application for accounting education. WIL is widely used in accounting education especially during remote learning, and the findings suggested that both enhances students' preparedness for future work, particularly considering recent changes affecting graduates' employability outcomes. The study is also in line with sustainable development goal 4 (SDG 4), which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

12:10-12:35

76714 | *Delve into Online Learning Experience of Adult Learners Through the Lens of Self Determination Theory*

PeikFoong Yeap, University of Newcastle, Australia

As the training environment is adjusting to online teaching and learning especially in the post pandemic era, learners' workload, the learning capacity, and the level of stress and anxiety associated with this transition are taking a significant toll on the lives of learners. This is a massive problem that is growing at an alarming rate. While some learners are thriving due to online learning, the toll of the virus, social isolation, increasing workload, and other associated effects are rising among many learners - a phenomenon that should not be overlooked. This study anchored itself on the self-determination theory (SDT) of motivation to investigate the Continuing and Education Training (CET) online adult learners' autonomy, competence, and relatedness needs using a qualitative approach. Purposive sampling method was used to identify respondents to participate in the study. Semi structured interviews were conducted among respondents. Data were coded and second order themes were developed and analyzed. The results revealed that course content that tailored and aligned with the personal learning preferences and student-centric hybrid approaches to content development and delivery are imperative factors to improve course uniqueness. Theoretical and practical implications are further discussed. The study also suggested future research opportunities to extend knowledge and understanding.

12:50-14:05 | Room 607

# Thursday Onsite Presentation Session 3

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Ghada Salama

12:50-13:15

73020 | *Students' Proceptual Thinking Outcomes in Learning the Chain Rules Utilizing Desmos Classroom Activities (DCA) as the Generic Organizer*

Desyarti Safarini TLS, Universitas Pendidikan Indonesia, Indonesia

Darhim Darhim, Universitas Pendidikan Indonesia, Indonesia

Dadang Juandi, Universitas Pendidikan Indonesia, Indonesia

This research aims to investigate students' proceptual thinking outcomes in learning the chain rules utilizing Desmos Classroom Activities (DCA) as the generic organizer with an embodied approach. This case study research includes 25 freshman students who took Calculus 1 during the fall semester of the 2022–2023 academic year. Students' proceptual thinking outcomes were analyzed based on the spectrum outcomes of proceptual thinking performance by Tall et al. (2001). The spectrum includes pre-procedure, procedure, process, procept, and axiomatic formal levels. DCA as the generic organizer to facilitate an embodied operation on the graph of a function. Students can easily drag the tangent line and tangency point altogether along the graph of a function, and at the same time, it allows them to magnify the screen, which helps them make sense of the tangent line and derivative concepts. Students generate various kinds of composite functions and prove the chain rules on the DCA through graphical exploration, numerical computations, and symbolic manipulations. DCA can contribute to the student's proceptual thinking outcomes in learning the chain rules. All students performed the proceptual thinking very well, which was reflected by 7 students (72%) using the quotient rules, 6 students (24%) using the chain rules, and the remaining 1 student using the formal definition of the derivative to prove the derivative of a trigonometric function. Most students have reached the procept level, which indicates a conceptual richness and flexibility to perform the mathematical process.

13:15-13:40

75164 | *Effects of Student Engagement, Satisfaction & Instructor Presence on Learning of DLSU Laguna STEM Students in Physics (Blended Learning)*

Victor Lorenzo Wong, De La Salle University, Philippines

Andrea Bardon, De La Salle University, Philippines

Gerylyn Guillen, De La Salle University, Philippines

Angela Nicole Henson, De La Salle University, Philippines

Jose Fernando Lajara, De La Salle University, Philippines

As the Philippines transitions to the "new normal", the education sector has also slowly switched from online to in-person classes through blended learning modality. This research explores the overall experiences of the students in a new modality, determining the relationships between student engagement, satisfaction, and instructor presence on their perceived learning. Through a quantitative survey, the researchers collected the perception of the STEM students in De La Salle University Laguna Campus in their course experience in General Physics 1 through blended learning. Analyzed through descriptive and Spearman's rank correlation analysis, the results revealed that the aforementioned factors all had a strong positive relationship with perceived learning ( $r_s = 0.5826, 0.7483, 0.612$ ), respectively. This further shows that student engagement, student satisfaction, and instructor presence are significant in the learning process of the students and have positively influenced them. Moreover, it was concluded that the blended learning modality has advantages that can be more utilized through the enhancement of course interactions. Lastly, it was recommended for future research to include other factors affecting perceived learning such as course organization and learner interaction in the blended learning environment, and explore courses that are aligned with the most preferred professions in the country.

13:40-14:05

73942 | *Breaking Barriers and Shaping the Future: Middle Schoolers Unleash STEM Superpowers with Female Global South Icons*

Ghada Salama, Texas A & M University at Qatar, Qatar

G. Benjamin Cieslinski, Texas A & M University at Qatar, Qatar

Tala Katbeh, Texas A & M University at Qatar, Qatar

Syed Abidi, Texas A & M University at Qatar, Qatar

As recent pedagogical strategies aim to promote and integrate STEM (Science, Technology, Engineering and Math), it is important to create a more inclusive and equal learning environment. This paper presents an initiative to engage students with STEM through introductions to renowned female Global South icons who have made indelible contributions to their STEM fields. The program is designed to inspire young minds and foster an appreciation of these remarkable female Global South scientists and engineers. Texas A&M University at Qatar's STEM Outreach program met with students from multiple schools, hosting workshops that familiarized them to a variety of STEM topics and Global South pioneers. For example, the life and contributions of famed architect Dame Zaha Hadid was discussed to introduce engineering design and civil engineering principles; emphasizing her architectural design and engineering of the lauded Al Janoub Stadium of Qatar's FIFA World Cup 2022. Students were tasked with designing their own structures, simple sand castles, and tested their load capacity. The success of this program is a motivator for future women of the Global South programs currently in development, with contributions from different STEM fields. Future programs will maintain a standard methodology to ensure they can be shared and independently developed by educators to shed light on the underappreciated female professionals of the Global South.

14:20-16:00 | Room 607

# Thursday Onsite Presentation Session 4

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Wan Hoong Wong

14:20-14:45

74803 | *A Study on Mathematical Anxiety, Mathematical Resilience of Phra Dabos Students and a Survey for Improving Mathematical Learning Management Plan*

Ratchanikorn Chonchaiya, King Mongkut's University of Technology Thonburi, Thailand

Rungrueng Chomboot, King Mongkut's University of Technology Thonburi, Thailand

Chokchai Alongkrontuksin, King Mongkut's University of Technology North Bangkok, Thailand

The purpose of this research is to study the mathematical anxiety and mathematical resilience of Phra Dabos students, Class 45, and to arrange topics in mathematics for industrial technicians to design a Network Diagram for the course, including interviews to ask about the stakeholders' requirements for the subject of mathematics for industrial technicians to improve the teaching process to be exciting and appropriate to the duration and learners can apply their knowledge to their full potential. The target group of this research is 78 disciples of Phra Dabos and two volunteers of Phra Dabos School. The experiment was divided into 2 phases. Phase 1: The researcher had Phra Dabos students complete a 10-item Mathematical Anxiety questionnaire and Mathematical resilience scale of 23 items, Phase 2, the researcher interviewed two students of Phra Dabos 8 branches, two people per branch, totaling 16 people, about the learning management in the past year and questioned to consult and ask for suggestions for improving the learning activities from experienced volunteer teachers. The data were analyzed using descriptive statistics, including; mean, standard deviation, percentage, and data analysis. The research results found that the overall mathematical anxiety of the 45th-generation Phra Dabos students was moderate. The overall mathematical resilience of the 45th generation of Phra Dabos students was also medium, and finally, the guidelines for improving learning management in the next academic year were obtained.

14:45-15:10

75809 | *The Impact of Interaction via Social Media on Youth Mental Health Through Social Media Content and Communication Style of Indonesian*

Hamita Sari, National Research and Innovation Agency, Indonesia

Ming-Chou Liu, National Dong Hwa University, Taiwan

Anita Hafid, National Research and Innovation Agency, Indonesia

Jamilah Akbar, National Dong Hwa University, Indonesia

Fatiha Khoirotunnisa Elfahmi, National Dong Hwa University, Taiwan

During the COVID-19 pandemic most of students globally suffered of mental health. Bisesdes virus wudespread, communication and interaction pattern on social media also play important role on their mental disorder including anxiety, depression, and mood disorders. It needs to confirm which content and interactions influence students and youth behavior. Methods: A total of 604 valid participant which obtain through online survey, aged 15-25 years at baseline. Structural Equation Modelling (SEM) was used to examine research hypotheses. Results: Social media interaction pattern has positive and significant effect on which content student discuss and sharem as well as their communication style. Furthermore, communication style has greater effect on student mental health than social content. Conclusions: the interaction of baseline students' emotional features with social media environment predicted divergent of social communication and interaction on social media. Both anxiety and depression from social influenced by communication and interaction pattern. Results: the results indicate that the main motivator of students in this context is the effectiveness and convenience of using social media, particularly in the use of content and communication with the determination of individuals and student communities. One way to predict the widespread of social media interaction options is to examine the motivation for using it individually, socially, and within the context of the student's environment. According to the findings, mental health is more particular, and choosing to participate in social media interactions is what drives students in these situations.

15:10-15:35

75684 | *The Well-Being and Stress Among Architecture Students at Chulalongkorn During the COVID-19 Crisis in Thailand*  
Sirirat Sereerat, Chulalongkorn Universty, Thailand

This study aims to determine well-being and stress among architecture students at Chulalongkorn University in Thailand during the Covid-19 crisis. The online questionnaires were distributed among 120 architecture students, and the interviews were conducted via Zoom in May 2022. The obtained data were analyzed using SPSS29 software, correlation analysis, and factorial ANOVA analysis of the relationship between the stressors and stress factors. During the past three months before the final project presentation, 80% of respondents spent time studying and screen time more than 7 hours while sleeping only 4-5 hours daily. During lockdown, stress levels increased because architecture students prolonged their screen time and social isolation. A total of 15 critical factors affecting architecture students' stress levels were determined: intensive academic work, difficulty of work, time limitation, and afraid of not being good enough or failing, only study and abusive critics were the most critical stressors. The most common physical health problems are office syndrome and computer vision syndrome. The most common mental health problems are sleep deprivation, burnout, anxiety, and depression. The results show that mental health issues have become common and critical among architecture students, associated with stressful learning environments rather than personal relationships, covid-19, or economic problems. The discussion and result would provide recommendations toward better sustainable life-long learning in architecture education.

15:35-16:00

73860 | *Coping Strategies Among Higher Education Students and Their Association with Academic Stress and Persistence*  
Wan Hoong Wong, Singapore Institute of Management, Singapore  
Elaine Chapman, University of Western Australia, Australia

Inability to cope well can result is high attrition rates among higher education students. As such, higher education institutions need to ensure that students are coping well in managing their academic stress and thus will persist to complete their studies. The aim of the presentation is to present the findings of a study conducted to examine the different coping strategies commonly used by higher education students studying in Singapore. The study was conducted using a sample of more than 200 undergraduate students studying in a private institution in Singapore. Through the presentation, this will provide an in-depth perspective on the different dimensions of coping mechanisms engaged by higher education students (active emotion coping, active problem coping, passive emotion coping and passive problem coping) and how these dimensions were associated with academic stress and intentions to persist amongst higher education students.

16:15-17:55 | Room 607

# Thursday Onsite Presentation Session 5

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Bei Hong

16:15-16:40

75998 | *A Study on the Learning Experience of an AI-Assisted Class: Focusing on Learning Presence of Students*

Su-min Lee, Pusan National University, South Korea

Sang-soo Lee, Pusan National University, South Korea

The aim of this study is to investigate the learning experiences of university students in AI-assisted classes. In particular, the focus was on exploring the learning presence in the context of class activities, aiming to provide insights into instructional design for professors. In order to discuss the effective role of instructors and the direction of AI utilization in AI-assisted classes, it is necessary to closely examine learners' perceptions of the teaching and learning activities. The research method used in this study is a mixed research method. In order to collect quantitative data, learning presence data were collected from 18 people who participated in an AI-assisted class at P university in 2023. Based on the collected data, the paired t-test was conducted to find out whether there was a change in the learners' learning presence before participating in the class and after participating in the 6th session. To collect qualitative data, interviews were conducted with 5 students in the class. The findings of the study revealed that participating students perceived a high level of learning presence, and this perceived presence was found to significantly predict learning outcomes. Furthermore, through interview analysis, factors influencing the presence were categorized, and limitations experienced during the learning process were identified. Through this research, an academic foundation can be established to effectively utilize AI in educational settings. This can lead to the development of instructional designs tailored to learners' needs and effective models for AI-assisted classes.

16:40-17:05

75480 | *Development and Implementation of Science Boost Camp: Impact on Student's Science Conceptual Understanding and Motivation to Learn Science*

Chin Chen Yong, Ministry of Education, Brunei

After COVID-19, the teachers in Brunei have been busy trying to catch up on the learning loss faced during the pandemic, especially the Year 11 science students who will be sitting for their O Level examination this year as the first cohort of the new 5129 Combined Science syllabus. Switching back from online learning during COVID19 to face-to-face learning in school has been a great challenge for the teachers. In this paper, the researcher is trying to understand what motivates these students to learn Science and to adapt back to face-to-face teaching and learning. This study employed the mixed method research (MMR) using the gap analysis model to understand the assumed causes of low achievement in the pre-mock examination of the Year 11 science students. This study also sought to understand how the science boost camp could be adopted to improve students' achievement in the O level examination and how the camp could be evaluated for their effectiveness. The initial analysis shows that the Science Boost camp was able to increase students' motivation and understanding of science concepts, the advantages of group work and active learning. In addition, the effectiveness of the boost camp was discussed and evaluated for the next boost camp as part of students' intensive examination preparation for their upcoming 'O' level examination. This study summarized the essential attributes of a Science Boost Camp weekly course as the future development as one of the strategies for O-level preparation.

17:05-17:30

75969 | *The Effects of the Flipped Classroom Model on Pre-university Students' Academic Performance and Learning Outcomes*

Sahrnizam Kasah, Maktab Duli Pengiran Muda Al-Muhtadee Billah, Brunei

This study investigates the implementation and impact of the flipped classroom model (FCM) on Year 12 pre-university students at one of the six form centres in Brunei Darussalam. Traditional pre-university education often revolves around time constraints to cover syllabi and prepare students for board examinations, leading to a reliance on conventional transmission-based teaching methods. However, the evolving educational landscape calls for a transition towards flexible, student-centred pedagogies. The FCM, an innovative iteration of student-centred learning, emerges as a potential avenue for facilitating this transition. Despite its potential, the application of FCM in pre-university education is relatively new, and its effectiveness across diverse subjects remains unexplored. To evaluate the efficacy of FCM in pre-university teaching and learning, a quasi-experimental design was employed across various A-Level subjects. Pre- and post-test scores were collected and analysed using independent sample and paired sample t-tests. Findings exhibit a substantial improvement in students' post-test performance across all subjects compared to their respective control groups. Furthermore, this study unveils positive effects of FCM on student learning outcomes, particularly in terms of independence, engagement, and collaborative attitude. Interestingly, no significant differences in mental effort and academic stress were reported between FCM and control groups. The accrued favourable outcomes underscore the potential of FCM as a contemporary and effective pedagogical model to be adopted in pre-university settings, contributing to enhanced teaching and learning approaches. This study thus advocates for the incorporation of FCM into pre-university education based on its observed benefits.

17:30-17:55

72813 | *Who Watched Pre-Lecture Tutorial Videos? Does Flipped Learning Help Beginners in Economics?*

Bei Hong, Singapore Management University, Singapore

The modern-day classroom is characterized by academic diversity, with students from varied backgrounds and with different levels of prior knowledge. This has compelled teachers to adopt innovative approaches to cater to the diverse abilities of students. In university courses, for example, some students may have a solid foundation in a subject like Economics due to their high school background, while others may have no prior exposure to the subject. To address this disparity in student abilities, this paper explores the use of flipped learning as a teaching approach in an introductory economics course. The study focuses on investigating the effectiveness of pre-lecture videos in improving students' exam outcomes, especially for beginners in Economics who may require more support from instructors than other students. The study involved the implementation of 42 pre-lecture videos covering basic concepts in the course. At the end of the course, the findings showed that beginners in Economics engaged more with the pre-lecture videos, and spent more time watching and completing them compared to non-beginners. Furthermore, the study observed an improvement in beginners' exam performance, with their average grade increasing as a percentage of the average of non-beginners. Overall, this study highlights the importance of adopting innovative teaching approaches, such as flipped learning, to cater to the diverse needs of students. It also provides evidence that pre-lecture videos can be an effective tool in enhancing students' learning outcomes, particularly for those with less prior knowledge of a subject.

18:10-19:25 | Room 607

# Thursday Onsite Presentation Session 6

Teaching Experiences, Pedagogy, Practice & Praxis

**Session Chair: Anirut Satiman**

**18:10-18:35**

73877 | *The Development of a Motor Control Experimental Set Through a Virtual Reality Program by Using Active Learning*

Tanapon Tamrongkunanon, King Mongkut's University of Technology Thonburi, Thailand

Tanes Tanitteerapan, King Mongkut's University of Technology Thonburi, Thailand

Chayanit Pichitronnachai, King Mongkut's University of Technology Thonburi, Thailand

The development of a motor control experimental set through a virtual reality program by using active learning. The objectives of this research for 1) Develop a motor control experimental set of operating the motor control circuit 2) Develop an active learning management through a virtual reality program 3) To evaluate the achievement of an active learning management to develop a practical skill 4) To assess the ability of operating the motor control circuit. The statistics for analyzing tool quality are accuracy and the statistics for analyzing the data were mean, standard deviation and percentage. The results showed that 1) The development of the motor control experiment set that was created had a validity or accuracy (IOC) score that passed the criteria, with the average IOC being 0.67-1.00. 2) an active learning management through a virtual reality program 3) The overall quality of activities was at a good level (mean = 4.50, S.D. = 0.81). When considering each aspect, it was found that it was at a very high level, with the highest mean being "learning media (mean = 4.75, S.D. = 0.38) 4) The students' practical skills for motor control circuit passed the criteria, representing 82.60 percent and for the target, 80% of the people are pass the criteria.

**18:35-19:00**

70926 | *The Development of a Digital Entrepreneurship Children Education Model in Malaysia*

Abdul Halim Masnan, Universiti Pendidikan Sultan Idris, Malaysia

Mohd Nazri Abdul Rahman, Universiti Malaya, Malaysia

Azizah Zain, Universiti Pendidikan Sultan Idris, Malaysia

Hafizul Fahri Hanafi, Universiti Pendidikan Sultan Idris, Malaysia

Masayu Dzainudin, Universiti Pendidikan Sultan Idris, Malaysia

Mazeni Ismail, Universiti Pendidikan Sultan Idris, Malaysia

The purpose of this study is to analyse the needs in developing a model for Digital Entrepreneurship Education for B40 group kindergarten children based on teachers' perceptions. The respondents of this study consisted of 367 kindergarten teachers across Malaysia. This research method was conducted quantitatively using a questionnaire. The collected data were analysed using Statistical Package Social Science (SPSS) version 21 software, considering the mean. The findings of the study revealed that teachers' perceptions of building the Digital Entrepreneurship Education Model for B40 Group Kindergarten Children under the aspect of "Children understand the benefits of saving money" had the highest mean of 3.93. While teachers' perception of "Digital skills should be introduced to children (21st century learning)" recorded the second highest mean with a mean of 3.86, followed by the statement "Children understand the concept of the value of money" with a mean of 3.83.

**19:00-19:25**

76110 | *Development of Online Instructional Model by Using Design Thinking Process to Enhance Innovation Design Ability, Creativity of of Undergraduates Students*

Anirut Satiman, Silpakorn University, Thailand

The purpose of this research were: 1) to design and develop of online instructional model by using design thinking process that integrates cognitive tools, 2) to design and develop online instruction course and activities 3) to study innovation design ability 4) to study creative thinking project and collaborative learning of undergraduate students, and 4) to evaluate the satisfaction of the students who studied via instructional model by using design thinking process that integrates cognitive tools. The subjects were 30 students who enrolled in the SU402 innovation and design course, during the first semester of the academic year 2022, Silpakorn University, Thailand. The results of this research are as follows: 1. The online instructional model with composed of 10 components 5 stages of the design thinking process 1) empathize 2) define 3) ideate 4) prototype 5) test and 5 steps of project-based learning activities for innovation design; 1) identification of a problem or of a need, 2) data collection, 3) planning, 4) construction project, and 5) project presentation. 2. The design and develop instructional model and learning activities was evaluated and approved by experts has a quality at the level of "high" 3. The students collaborative learning who studied through online instructional model was at the level of "good". 4. The students creative thinking project and innovation design ability who studied through online instructional model was at the level of "very good". 5. The satisfaction of the students who studied through online instructional model was at the level of "high"

09:00-10:40 | Room 608

# Thursday Onsite Presentation Session 1

## Assessment Theories & Methodologies

### Session Chair: Hsiao-Chi Ho

09:00-09:25

75110 | *Law School Assessment & Pedagogy in the Time of Generative AI*  
Stuart Hargreaves, The Chinese University of Hong Kong, Hong Kong

This paper considers ways in which generative AI tools such as ChatGPT may be used as part of pedagogy and assessment in law schools. Concerns have been raised that generative AI poses a significant risk of academic dishonesty in written work. To evaluate this risk in the context of legal education, in a previous project the author had ChatGPT generate answers to twenty-four different exams from an English-language law school based in a common law jurisdiction. While that project suggested that for the most part conventional law school assessments are for the time being relatively immune from the threat generative AI brings, this is unlikely to remain the case as the technology advances. However, as the appropriate use of generative AI is almost certain to be a necessary skill in all forms of knowledge work in the future, this paper considers ways in which generative AI tools can be incorporated into the legal classroom, and reports on early results from the author's own teaching experience. While it is clear that generative AI technologies will change how universities teach and assess (across disciplines), a solution of prevention or denial is no solution at all.

09:25-09:50

70849 | *Predicting Physics Students' Achievement Using In-class Assessment Data: A Comparison of Two Machine Learning Models*  
Purwoko Haryadi Santoso, Universitas Negeri Yogyakarta, Indonesia  
Hayang Sugeng Santosa, Universitas Muhammadiyah, Indonesia  
Edi Istiyono, Universitas Negeri Yogyakarta, Indonesia  
Haryanto Haryanto, Universitas Negeri Yogyakarta, Indonesia  
Heri Retnawati, Universitas Negeri Yogyakarta, Indonesia

Data is the primary source to scaffold physics teaching and learning both for teacher and student as mainly reported through in-class assessment. Machine learning (ML) is an axis of artificial intelligence (AI) study that greatly attract for the development into physics education research (PER). ML is built to predict students' learning that can support students' success to an effective physics achievement. In this paper, two ML algorithms, logistic regression and random forest, had been trained and compared to predict students' achievement on high school physics (N = 197). Data of students' achievement was harvested from in-class assessment administered by a physics teacher in terms of knowledge (cognitive) and psychomotor during 2020/2021 academic year. Three assessment points of knowledge and psychomotor were employed to predict students' achievement as dichotomous scale on the final term examination. By combining in-class assessment of knowledge and psychomotor, we could discover plausible performance of students' achievement prediction using the two algorithms. Aspect of knowledge assessment was the determinant factor in predicting high school physics students' achievement. Findings reported by this paper recommended open room for the ML implementation for educational practice as well its potential contribution to support physics teaching and learning.

09:50-10:15

75815 | *Design of AI-Based Education Application Evaluation Model in School Context From an Ecological Perspective*  
Jinho Bai, Pusan National University, South Korea  
Su Hong Park, Pusan National University, South Korea  
Ji Yeon Choo, Pusan National University, South Korea

Purpose of this study: The purpose of study is to develop an ecological evaluation model of AI-based education that serves as a foundation for growth. An ecological approach was prioritized to change the organizational culture of the school. The ecological model developed in the final stage of the research was named IMMM (Infra, Micro, Macro, Mega) evaluation model, and the evaluation model was applied to the field. Participants: In the research, participants were 3 schools in Busan, South Korea including 39 teachers, 333 students, and 236 parents. Method: It conducted a literature review and member checking of evaluation models. Based on the review, the evaluation framework was designed consisting with resources, learning and behavior, school culture, and social impacting. Based on the evaluation framework, questionnaires and interview questions were developed for students, teachers, and parents. It conducted pre-post survey of students, teachers, and parents online, and semi-structured FGI was conducted for the school's administrators and key members. The data collected through school reports, questionnaires, and interviews were analyzed and interpreted by applying an evaluation model. Discussion and Implications: It implicates that it is a framework that can be used for the purpose of examining the entire process and highlighting the uniqueness and excellences of schools. Also, from the perspective of AI education, it suggested that it is necessary not only to expand facilities and equipment through budget, but also to recognize the importance of artificial intelligence education among and to have the ability to utilize facilities and equipment.

10:15-10:40

75941 | *An Exploratory Study on Development of Teachers Empathy Scale: A Rasch Measurement Approach*  
Hsiao-Chi Ho, Providence University, Taiwan

Teachers' empathy is often regarded as one of the factors to motivate and engage learners in learning. This exploratory study developed the Teacher Empathy Scale (TES) to understand the empathetic tendencies among Taiwanese primary and secondary school teachers. Four subscales consisting a total of 22 items were developed using five-point Likert scale included: Teachers' Empathy Towards Students (Subscale 1), Teachers' Empathy Towards Colleagues (Subscale 2), Teachers' Empathy towards Students' Parents (Subscale 3), and Teachers' Overall Self-evaluation of Empathy (Subscale 4). 469 Taiwanese elementary and junior high school teachers (118 males and 351 females) participated in the development of the TES. The multidimensional Rasch Rating Scale Model was employed to assess model-data fit and to obtain more accurate estimation of correlations and the reliability of person measures among the four subscales. Differential item functioning analyses were conducted across genders. The results showed that 18 items were retained for the current version of TES and had a reasonably good model-data fit. The correlations of person measures from four subscales were between .72 and .96; the person separation reliabilities of the measures from Subscale 1~4 were .83, .82, .84 and .87, respectively. No significant DIF was found across gender. It was concluded that the TES is a reliable and valuable self-report tool for assessing teachers' empathy. Future studies will involve collecting a larger sample to further ensure the reliability and validity of the TES.

10:55-12:35 | Room 608

# Thursday Onsite Presentation Session 2

## Assessment Theories & Methodologies

### Session Chair: Jonathan Barcelo

10:55-11:20

74867 | *Examining Students in Science: The Relationship of Science Engagement and Conceptual Understanding in Biology Across Sex*  
Maria Theresa Tadena, Mindanao State University-Iligan Institute of Technology, Philippines  
Edna Nabua, Mindanao State University-Iligan Institute of Technology, Philippines

One of the recent issues in education today is the growing student engagement crisis in classrooms across the country. Survey findings revealed that the vast majority of educators are more concerned about the student's engagement in classroom-based learning. The finding showed 50% of student respondents claimed they are not engaged in what they are learning in school while 95% of teacher-respondents believe that student disengagement is a top priority. Student engagement has been identified as a primary variable in understanding dropout, one of the keys to addressing low achievement and a robust predictor of achievement. This study explored the differences in the level of students' engagement in learning science and also described the performance in the conceptual understanding of Biology, across sex. This also determined the significant relationship between students' science engagement and conceptual understanding, across sex. The study used purposive sampling and descriptive-correlational research design. The findings of the study showed the strength of the linear relationship between conceptual understanding and science engagement varies by sex. Thus, the results indicate that conceptual understanding is moderately associated with engagement in science lessons and tasks in females, but there is no relationship between conceptual understanding and science learning involvement or science effort and preparation in either males or females.

11:20-11:45

75866 | *An Assessment of Students' Mathematical Competency Through the Mathematics Festival's Activity*

Narumon Changsri, Khon Kaen University, Thailand  
Ajchara Inprasitha, Khon Kaen University, Thailand  
Maitree Inprasitha, Khon Kaen University, Thailand

The purpose of this research was to explore ways in assessing students' mathematical competencies needed for the 21st-century goal. The creation of the Thailand Mathematics Festival was adapted from the original Moscow Mathematics Festival in providing various assessment activities to analyze students' mathematical competencies. The target group consisted of 124 seventh-grade students from 14 schools who participated in the second Thailand Mathematics Festival 2020. The research instrument was the Olympiad activity as a part of the Mathematics Festival. This was used to collect their mathematical thinking/ideas related to mathematics contents defined by experts from the Moscow Center for Continuous Mathematical Education (MCCME, 2021) and encompassing geometric facts; decimal notation; Constructive; combinatorics; Textual problem, and Logical tasks that will lead to the performance of the students' mathematical competence. Data were collected based on students' expressive ideas according to their problem-solving solutions, indicated in their worksheets. Each problem comprised two sections required students to write their answers and explanations on how they found the solution. The data were analyzed by using the mathematical thinking framework of Isoda & Katagiri (2012). The findings indicated that the Mathematics Olympiad functions as a tool for assessing the mathematical competencies of seventh-grade students. The findings imply that students have the ability to exhibit their mathematical competencies through their mathematical thinking in terms of the following Mathematical idea: Idea of Sets; Units; Representation; Operation; Algorithms; Approximations; Fundamental Properties; Functional Thinking, and Idea of Expressions.

11:45-12:10

75894 | *Assessing the Validity and Reliability of the Inventory of Science Teacher Readiness in Implementing Classroom-based Assessment (ISTRICBA)*

Mat Rasid Ishak, University of Malaya, Malaysia  
Hidayah Mohd Fadzil, University of Malaya, Malaysia  
Harris Shah Abdul Hamid, University College MAIWP International, Malaysia

Teacher readiness is the willingness of a teacher to implement a planned program successfully. Readiness is crucial in ensuring a program can be implemented at the individual or organizational level. The readiness of science teachers to implement Classroom-Based Assessment (CBA) determines the direction and success of primary school assessments in Malaysia. This pilot study aims to create and evaluate the Inventory of Science Teachers' Readiness in Implementing Classroom-based Assessment (ISTRICBA). There have been many studies on CBA. However, there are limitations in measuring the readiness of science teachers to implement CBA. Therefore, it is necessary to have an inventory that is strong conceptually and psychometrically. This challenge was addressed by developing the ISTRICBA, which has five measurement dimensions: knowledge about CBA, skills of CBA, resource support, attitudes, and professional values. The development of ISTRICBA requires validity and reliability for it to be used. This study aims to (1) test the quality characteristics of the ISTRICBA items and (2) determine the reliability of the ISTRICBA obtained using the Rasch Model measurement. The research involves the administration of a survey questionnaire to 44 science teachers in a district in Malaysia. The findings show that the ISTRICBA comprising 168 items, has good psychometric characteristics and meets the measurement criteria of the Rasch measurement model. The item quality and reliability also prove that the whole dimension is suitable. The findings show that the ISTRICBA can measure science teachers' readiness to implement CBA.

12:10-12:35

74747 | *Promoting the Progression of Chemical Reasoning of Pre-medical Students: Comparison of Reductionist Mereology Instruction and Conventional Instruction*

Jonathan Barcelo, Saint Louis University, Philippines

Promoting the progression of chemical reasoning among pre-medical students fosters the improvement of clinical decision-making, as chemistry concepts are embedded in health contexts. However, there is a dearth of literature on innovative teaching strategies that target the progression of chemical reasoning in biochemistry. In this study, the effects of conventional instruction and reductionist mereology instruction were compared using Rasch analysis. The reductionist mereology instruction involved the utilization of reductionist part-whole relationship fallacies in chemistry during argumentation activities, while conventional instruction was based on the application of the structure-property relationships. Thirteen intact classes of pre-medical students from a tertiary institution in the Philippines were randomly assigned to the mereology instruction group (N=290) and conventional instruction group (N=287). The teaching interventions were implemented for 12 weeks. Students' chemical reasoning in chemistry was assessed before and after the teaching interventions. Other variables, such as knowledge of visual representations, prior knowledge of chemistry concepts, and cognitive load were also measured. Rasch analyses were applied in the analysis of the impacts of the teaching interventions on the progression of chemical reasoning of the students. While both interventions were effective, the reductionist mereology instruction resulted in a greater progression of chemical reasoning for pre-medical students. The conditions to ensure the success of the teaching interventions were discussed and implications to chemistry teaching in pre-medical programs were described.

12:50-14:05 | Room 608

# Thursday Onsite Presentation Session 3

Educational Research, Development & Publishing

Session Chair: Johnson Li

12:50-13:15

76060 | *Digital Teaching Aid Development to Answer Challenges in Learning Quadratic Equation in Indonesia*

Dion Krisnadi, Universitas Pelita Harapan, Indonesia

Samuel Lukas, Universitas Pelita Harapan, Indonesia

Pujianto Yugopuspito, Universitas Pelita Harapan, Indonesia

Dina Stefani, SPK SMAK 8 Penabur, Indonesia

Quadratic equation is considered as the most challenging mathematics topic for secondary high school students in various countries, including Indonesia. Studies have been done to identify challenges in the teaching and learning of this topic. The three most common challenges discovered include dull teaching method that does not encourage active learning, difficulty in obtaining conceptual understanding on quadratic equations and its associated information, and difficulty in interrelating different solution methods, including the factor form, vertex form and graphical representation. Teaching aid in the form of digital technologies is commonly proposed to address these challenges. However, existing media may not fully address all the discovered challenges. Moreover, digital media adds additional challenges in the form of various distractions that can hinder students' focus in learning the material. Therefore, this paper discusses the development of a digital teaching aid that is specifically designed to help learn quadratic equations by mapping challenges to features of the digital media. As a result, an offline computer software has been developed with the following five features: it supports both English and Bahasa Indonesia, it has well-defined input mechanisms for ease of use, it is able to generate graph automatically from a given quadratic equation and highlight it with associated information of the equation, it has an "Exercise" menu with a simple game to maintain students' interest, and it has three "Form" menu to interrelate various forms of a quadratic equation complete with sliders to experiment with coefficients of a quadratic equation.

13:15-13:40

72909 | *Supporting Schools, Educators, Students, and Families in a Transition to a Four Day Week*

Ahmed Aly Shaban Abdelmoteleb, Higher Colleges of Technology, United Arab Emirates

Matthew Robby, Sharjah Private Education Authority, United Arab Emirates

ted purinton, Sharjah Education Academy, United Arab Emirates

suleiman hamdan, Sharjah Private Education Academy, United Arab Emirates

Mokhtar Burchak, Sharjah Private Education Academy, United Arab Emirates

The Emirate of Sharjah transitioned to a four-day workweek in January 2022. To support schools, educators, students, and families in this transition, the Sharjah Private Education Authority (SPEA), a regulatory body, conducted various stakeholder surveys in January 2023. The results of these surveys have provided SPEA with a clear set of indicators on satisfaction and challenges, related to such aspects as productivity, family financial impact, learning, work-life balance, wellbeing, health, and school operations. The results of the surveys will be reported publicly to all relevant stakeholder groups in May 2023. The results will provide insight into the ways in which schools, families, and educators have responded, both positively and negatively, to the changes. The results contributed to a roadmap to support SPEA as a regulatory body to suggest more initiatives supporting the wellbeing and productivity, The results also acted as a catalyst for the sister company Sharjah Education Academy (SEA) to improve the professional development courses provided to teachers and school caders. The research will briefly cover some of the main findings from the surveys; however, and more importantly, it will offer a theoretical account of the ways in which the Sharjah findings differ from the global literature on reduced time in school schemes. For example, there is a moderate body of literature in the United States on reduced time in school due to two factors: first, limited transportation options in rural areas requiring school systems to find alternate solutions, such as reducing the week from five days to four;

13:40-14:05

73874 | *Applying a Modern, Missing Data Approach (Multiple Imputation) to Range Restriction Involving Selection of Students: A Simulation Study*

Johnson Li, University of Manitoba, Canada

Range restriction is a common methodological problem arising from a selection procedure that reduces the range of scores for evaluation. Taking the association between high-school SAT and university GPA scores as an example, the observed correlation is often smaller than it should be because not all high-school students have a chance to be admitted to university, and hence, their university GPA scores are missing. Conventional approaches addressing this issue involve Thorndike's (1949) bias-correction formulae where the variance of the unrestricted scores (e.g., variance of high-school SAT scores) can plugged into those formulae. Despite their popularity, this variance is not always available in practice. Pfaffel et al. (2016) proposes the application of a modern, missing-data handling approach—Multiple Imputation (MI)—to range restriction. To further explore its application to additional selection procedures and mechanisms (e.g., multiple selection factors such as a composite score based on SAT, teacher's evaluation, etc., inclusion of mediating paths), this study addresses a Monte Carlo simulation study that evaluates the performance of Thorndike's and MI approaches based on various manipulations: selection ratio, sample size, data distribution, and effect size. The results showed that the MI outperforms Thorndike's approach in terms of the bias of the estimates and coverage probability of the 95% confidence intervals. This offers a useful approach to correct for the bias due to various selection procedures in educational contexts, especially it does not require the variance of the unrestricted scores. Implications of the findings to educational research involving selection of students will also be discussed.

14:20-16:00 | Room 608

# Thursday Onsite Presentation Session 4

## Assessment Theories & Methodologies

### Session Chair: Mohammad Ahmadi

14:20-14:45

73303 | *The Impact of Teacher Feedback Literacy on EAP Student Writing: Two Case Studies from a Taiwanese Public University*  
Vicky Chang, University of Melbourne, Australia

Emerging empirical evidence suggests that feedback literacy is an important factor in examining higher education (HE) feedback practices (Molloy, Boud, & Henderson, 2020). Models have demonstrated how the feedback literacy of teachers and students interact and contribute to effective uptake (Carless & Winstone, 2020). In English as an additional language (EAL) contexts, relatively few studies have investigated the role of feedback literacy in the feedback process or their interrelated effect on feedback uptake and subsequent writing improvement (Lee, 2017). Drawing on a multiple-case study design, this research explores the relationship between how teacher feedback literacy could influence students' responses to feedback on EAL writing in a Taiwanese public university. To unpack the connections between teacher feedback literacy and student feedback uptake, course syllabi, course materials, teachers' oral and written feedback, and student and teacher interviews were deductively coded and analysed based on Carless and Winstone's feedback literacy framework. Students' drafts and revisions were also examined to assess their immediate responses to feedback. Results show that the two teachers, with varying traits of teacher feedback literacy, influenced their students differently. Teacher A, who adopted a more teacher-centric approach to feedback, was more successful in impacting students to directly employ teacher feedback for writing revisions. On the other hand, results from Case B, in which the teacher implemented a more student-centred feedback practice, revealed more traces of student feedback literacy. This research contributes to validating feedback literacy frameworks in HE and provides context-specific evidence for EAL writing, offering insights into feedback efficacy.

14:45-15:10

75727 | *Analysis of Teachers' Assessment on the Competency Level of Freshmen in a University in Vietnam*  
Lilibeth Abrera, FPT Univeristy, Vietnam

The demand for highly educated students with multilingual skills, particularly in English, has grown out of Vietnam's integration into globalization. Despite the government's efforts to raise the English level, Vietnam is still in the low proficiency category. This research sought to know the following: the profiles of the teacher-respondents and whether they were factors to the learners' verbal competence, the teacher-respondents' perceptions of the level of students' oral and written competence, and if there was a significant difference on the respondents' perceptions of the students' oral and written communication when grouped according to their profile variables. The ten respondents accomplished the researcher-made survey instrument comprising of two parts. Part 1 carried the respondents' eight profile variables. Part 2 had a 5-point Likert scale questionnaire. For data analysis, the statistical tools employed were frequency/percentage, mean/standard deviation, and t-test/analysis of variance. Results revealed that the respondents' profiles generally, had no bearing on their perception of students' verbal competence. Students were perceived to be in the intermediate level of oral response and comprehension, but were poor in vocabulary and idioms. In writing, students were in pre-intermediate level. Lastly, there was no significant difference on the respondents' perceptions when grouped according to their profile variables. Recommendations given included continuous professional growth, curriculum improvement, and further investigation of correlation between student competence and quality of instruction.

15:10-15:35

73457 | *Using SOLO Taxonomy to Enhance Students' Assessment Literacy in Chinese Language Reading Comprehension*  
Wei Woon Mok, Orchid Park Secondary School, Singapore  
Lan Hong, Dunman High School (Senior High), Singapore  
Tan Ching Yeo, Hwa Chong Institution (College Section), Singapore  
Jun Wang, Victoria School, Singapore

The SOLO (Structure of Observed Learning Outcomes) Taxonomy (Biggs & Collis, 1982) offers a comprehensive framework for curriculum design, classroom activities, and assessment, promoting effective teaching and learning across five levels of understanding. Our study focuses on Singaporean students learning Chinese Language (CL), who encounter challenges in comprehending and analyzing complex passages requiring higher-order thinking skills. Our objective is to investigate the effectiveness of using SOLO Taxonomy rubrics to enhance students' assessment literacy, measured by their ability to generate more sophisticated responses in CL reading assessments. Over a two-year action research project, we engaged 170 students aged 15 to 18 from four secondary schools and junior colleges in Singapore. Our hypothesis posits that an intervention guided by SOLO Taxonomy principles significantly enhances students' assessment literacy. By employing a SOLO Taxonomy rubric to convey assessment criteria, students effectively leverage feedback to bridge their learning gaps. The rubric facilitates self-assessment and peer-assessment, prompting reflection on comprehension, identification of areas for improvement, and constructive feedback exchange among peers. Through a pretest-posttest control group design and analysis of quantitative and qualitative data, including student and teacher feedback, we observed a noteworthy improvement in students' comprehension and analysis of complex passages. These findings affirm the practical value and significance of incorporating SOLO Taxonomy to elevate students' assessment literacy in CL reading comprehension. Our research sheds light on how SOLO Taxonomy equips students with the skills to evaluate and advance their own learning progress in this domain.

15:35-16:00

74746 | *Teaching Rhetorical Theory for Effective Argumentative Essay Writing*  
Mohammad Ahmadi, Waseda University, Japan

To construct persuasive arguments, it is crucial to base premises on widely accepted opinions within the audience. Given that argumentative writing relies heavily on opinions and requires addressing commonly held beliefs (endoxa), the integration of classical rhetorical theory into the teaching of argumentative essays can offer distinct advantages. This research aims to explore the practical application of classical rhetorical theory to enhance the development of compelling argumentative essays in educational settings. The research is divided into two main parts. In the first part, a theoretical approach is employed to propose an ideal model and framework for teaching rhetorical theory effectively. This section outlines the steps educators need to take to introduce rhetorical theory concepts to students in a comprehensible manner. By doing so, educators can help students grasp rhetorical theory and apply it practically in crafting persuasive essays. In the second part, a qualitative method is used to evaluate the application of rhetorical theory in a class where students were tasked with writing argumentative essays. The evaluation aims to determine whether teaching rhetorical theory has assisted students in crafting more persuasive essays and whether they have successfully incorporated rhetorical techniques into their writing. The research's findings shed light on the potential benefits of incorporating a method that teaches rhetorical theory in writing courses, especially those focused on argumentative essays. Moreover, the results indicate that incorporating a method that teaches rhetorical theory in writing courses can significantly decrease students' reliance on AI.

16:15-17:55 | Room 608

# Thursday Onsite Presentation Session 5

Educational Research, Development & Publishing

Session Chair: Joan Alejo

16:15-16:40

75844 | *Lab Rotation Blended Learning Model in Promoting Computational and Critical Thinking: An Assessment of Multiple Stakeholder Needs*

Syahrul Alim, King Mongkuts' Institute of Technology, Thailand  
Sirirat Petsangsri, King Mongkut's Institute of Technology, Thailand  
John Morris, King Mongkut's Institute of Technology, Thailand

Understanding the needs are one of the learning success determinants that can assist in an efficient and targeted learning process. The more parties who participate resulted the more comprehensive understanding of it. We aim to identify multiparty needs for the lab rotation model in terms of fostering computational and critical thinking skills. Participants were 49 students, 3 graduates, 3 statistics instructors, and 1 management representative from Universitas Bosowa. Data was gathered through interviews on the use of blended learning at each station of rotation model. While the questionnaire was geared for students. We noticed that: (1) statistics learning strategy emphasizes teacher-centered and face-to-face learning. (2) incorporating a range of activities is critical since it keeps students interested, greater than single activities, and less stressful. (3) computational thinking could be improved by using step-by-step instruction, creating connections between each material component, and using a flowchart or mind mapping to provide key questions. Meanwhile, the critical thinking could be improved by conducting spontaneous exams, asking student involvement, and rewarding them. While descriptive analysis revealed that students tend to agree, 92% (45) that the lab rotation model activity should be employed, while 4% (2) disagreed. Student expected that needing more learning activities and rewarding. It means that learning activities using the lab rotation model meet the participants needs, which consists of initial learning station (ILS), traditional learning station (TLS), individual practice station (IPS), group learning station (GLS), and final learning station (FLS). In response, the learning process can employ the lab rotation model.

16:40-17:05

72323 | *Factors Affecting Student's Satisfaction at University Level in India*

Tanushree Sharma, Manipal University Jaipur, India  
Mohd. Ayaz, Manipal University Jaipur, India

Many studies have been conducted to investigate the factors that contribute to students' satisfaction or dissatisfaction with their higher education experience. However, no single research examines the major aspects of a learning program that have been demonstrated to be significant determinants of student satisfaction. This research examines the primary factors that determine students' perceptions of overall satisfaction, with a focus on management students in India. Student's response was measured through an adapted questionnaire on a 5-point Likert scale. The sample size of the study consisted of 561 students belonging to the management domain. The five factors have been identified which are mainly affecting student satisfaction after running factor analysis on the data collected using SPSS, the factors are i) Program Effectiveness ii) Teaching and learning iii) Continuous Assessments iv) Infrastructure v) Supporting facilities. Out of these factors, the factor which is impacting most are the program effectiveness and teaching and learning. It has a significant impact on student satisfaction. This paper is intended to serve as a starting point for Institutions, that are developing a student satisfaction survey or who just want to learn about the characteristics of an academic program that are most likely to influence student perception of the program.

17:05-17:30

74891 | *Impact of State and Institutional Policies on Research Culture in Kazakhstani Higher Education Institutions*

Askat Tleuov, Kimep University, Kazakhstan  
Kairat Moldashev, Suleyman Demirel University, Kazakhstan

This study examines the faculty-based response to the internationalization of research (IoR) policies in Kazakhstan, a developing country that aims to integrate its local academia into the global scientific community. In recent years, World University Rankings (WUR) have gained increased prominence globally, and as a result, governments and universities have introduced policies that put pressure on academics and graduate students to publish in high-impact factor international, peer-reviewed journals. The authors adopt a faculty-based perspective to explore the response of academia in Kazakhstan to these policies. A literature review was conducted to guide the data collection and interpretation. Qualitative data were collected through document analysis and semi-structured interviews with faculty members in Kazakhstani universities. The findings of this study suggest that IoR policies in Kazakhstan lead to a variety of responses from academia. These responses range from genuine engagement with the policies and a genuine desire to publish in high-impact factor journals to gaming and token conformity, where individuals only superficially comply with the policies. This research sheds light on the impact of IoR policies on academia in a developing country and provides valuable insights into the complex ways in which local academia is receiving these policies. It highlights the need for further investigation into the effects of these policies on faculty and universities in other developing countries. By understanding the responses of academia to IoR policies, policymakers can better address the challenges associated with integrating local academia into the global scientific community.

17:30-17:55

72659 | *Exploring Boundaries: Elevating Research Capabilities of Teachers in St. Agnes Academy, Inc.*

Joan Alejo, St. Agnes Academy, Inc., Philippines  
Heidi Donghit, St. Agnes Academy, Inc., Philippines  
Owen Del Castillo, St. Agnes Academy, Inc., Philippines

The study aimed to determine research capabilities of teachers in St. Agnes Academy, Inc. specifically on writing a research paper and a publishable research paper. It was also geared to create a comprehensive and sustainable research program for the institution and serve as model for other provide IBED institutions in terms of framework, organization, manual, and activities. It made use of descriptive evaluative method. The teachers were moderately capable both in writing a research paper and writing a publishable paper. The profile of the teachers affects their capabilities in writing a research paper and publishable research paper. Age, number of years in teaching, undergraduate course, post graduate studies, and attendance to seminars and workshops related to research are the determining factors in terms of capabilities of the teachers. These factors were considered in the creation of a research program for the IBED institution.

18:10-19:25 | Room 608

# Thursday Onsite Presentation Session 6

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Kwanchai Chandang

18:10-18:35

73767 | *Use of Contextualized Activity Sheets in Improving Students' Knowledge on Climate Change*

Pauline Cueno, De La Salle Medical and Health Sciences Institute, Philippines

Voltaire Mistades, De La Salle University, Philippines

As a major global issue, climate change is one of the topics in the senior high school curriculum, specifically in the Earth Science subject. Designing instructional materials in which the learners can relate their personal experiences to climate change plays an important role in enriching their knowledge about climate change. This paper aims to develop and evaluate the use of contextualized activity sheets to improve grade 11 students' knowledge on climate change using the PDSA framework. The researcher-made contextualized activity sheets are composed of six activities anchored to the Department of Education (DepEd) learning competencies. Experts in the field of science education and environmental science validated the contextualized activity sheets, where an overall mean rating of 4.51 is interpreted as Very Acceptable. In addition, pre-test and post-test on the climate change concept test were administered to 157 students to measure the students' knowledge. The results showed that the use of the contextualized activity sheets has a significant difference on the students' knowledge on climate change from the pre-test and post-test, while the Cohen's *d* result indicated that it has a medium effect on students' knowledge. These results suggest that the contextualized activity sheets can enrich the students' knowledge on climate change and can still be enhanced to suit the needs of other learners from different localities.

18:35-19:00

73975 | *Development and Evaluation of High School Physics Courseware Package for Health Track STEM Students*

Fredyrose Ivan Pinar, De La Salle Medical and Health Sciences Institute, Philippines

Gabriel Ian Guiao, De La Salle Medical and Health Sciences Institute, Philippines

In response to the implementation of distance learning amidst the COVID-19 pandemic, creative means to continue learning have been implemented through a mix of both online and offline modalities. The Special Health Sciences Senior High School in the Philippines developed courseware packages available online through the LMS and offline through printed modules to ensure uninterrupted delivery of learning offered in flexible modes. This study aims to evaluate the overall quality of the contextualized General Physics courseware package developed for Health Track senior high school students in support of student learning. Quantitative and qualitative evaluation from 393 students were obtained through the use of a 17-item instrument with determined factors on Quality of Content (QC), Potential Effectiveness as a Teaching-Learning Tool (PE) and Ease of Use (EU). The courseware package developed has been evaluated to have positive overall quality based on the three factors (MeanQC = 4.26; MeanPE = 4.13; MeanEU = 4.11; Overall Mean = 4.16). Learners generally described the courseware package to be helpful in further understanding complex Physics lessons. This suggests the use of complementary online-offline courseware packages for better student learning in consideration to the different learner profiles and contexts.

19:00-19:25

74423 | *Developing Competency-Based Active Learning Flipped Classroom Model to Enhance Grade 11 Students' Academic Achievement, Programming Competency, and Computational Thinking*

Jirutthitikan Pimvichai, Mahidol University, Thailand

Kwanchai Chandang, Sirattana Wittaya School, Thailand

This research aimed to develop the Competency-based Active Learning Flipped Classroom (CALFC) Model to enhance Grade 11 students' academic achievement, programming competency, and computational thinking in Basic C programming language. The sample was 31 Grade 11 students, who enrolled in the second semester of the academic year 2020, from one secondary school located at Sisaket Province, Thailand. The research instruments used were: a) Academic Achievement Test, b) Programming Competency Test, c) Computational Thinking Test, and d) Satisfaction toward CALFC Questionnaire. The statistical analysis used were mean, standard deviation (SD), and paired samples t-test. The research findings indicated that: 1) the efficiency of CALFC Model was at a high level with 82.56% from formative assessment and 83.67% from summative assessment. The students who learned with the CALFC Model significantly had higher academic achievement, programming competency and computational thinking in Basic C programming language. In addition, the students expressed high satisfaction towards the CALFC Model.

09:00-10:40 | Room 701

# Thursday Onsite Presentation Session 1

Foreign Languages Education & Applied Linguistics (Workshops)

**09:00-09:50**

75214 | *From the Classroom to the Community: How the Bilingual Village Connects Students with Local Businesses to Practice Second Language Skills*

Joyce Nutta, University of Central Florida, United States

This workshop session will present the Bilingual Village, a physical and virtual network of schools and community partners that enables second language learners to practice speaking their new language. In the Bilingual Village, public businesses, organizations, agencies, individuals, and institutions welcome and celebrate second language learners, offering them an authentic, encouraging space to practice their new language in the real world. Funding for the inception of the Bilingual Village was provided by the US Department of Education's (USDOE) Office of English Language Acquisition to further school, family, and community engagement in multilingual students' education, and now the Bilingual Village has transitioned to a non-profit organization. The author will share how the Bilingual Village was developed and will lead participants in whole and small group discussions about how they can connect with the multilingual and multicultural assets in their communities to create their own local Bilingual Villages. Free online resources, such as logo graphics, implementation guides, classroom preparation materials, informational flyers, and more, will be shared, and opportunities to network with Bilingual Village participants in different communities will be provided. This workshop will also give the first public preview of the free Bilingual Village app that is currently in development.

**09:50-10:40**

73878 | *How to Support EFL Learners' Development of Argument in English Argumentative Writing Through Six Thinking Hats*

Mei Lin, Newcastle University, United Kingdom

Chang Liu, Newcastle University, United Kingdom

Argumentative writing is the most prevalent genre in diverse writing tests. Developing a good argument is the prerequisite for argumentative writing. However, how to construct academic arguments is often regarded as a difficult task by most English as a foreign language (EFL) learners. It calls for a need to explore effective instructional strategies to teach English argumentative writing with the aim of developing EFL learners' arguments. This workshop shares our experience of using a Six Thinking Hats approach to help students understand critical and creative thinking, the key elements required for developing arguments, through providing a dialogic and creative space to enable students to develop their arguments. Through a range of practical activities, the workshop demonstrates how the approach can help EFL learners to develop their arguments, sharpen their critical thinking, explore their own potential by taking an active role in their learning, and enhance their creative thinking. Considering these points, this interactive workshop will be as follows • Introduce concepts of Six Thinking Hats • A brief overview of research about applying Six Thinking Hats in the EFL context • Demonstrate how to use a Six Thinking Hats approach as an effective pedagogical strategy for EFL learners to experience and collaboratively develop arguments from multiple perspectives. • Making suggestions on things to consider when applying Six Thinking Hats in the EFL context. Therefore, participants can adapt the workshop activities to their specific teaching contexts.

10:55-12:35 | Room 701

# Thursday Onsite Presentation Session 2

Learning Experiences, Student Learning & Learner Diversity (Workshops)

**10:55-11:45**

72452 | *Developing Self-Directed Learning: From Engaging Students to Empowering Students!*

Geok Hwa Khoo, Dunman High School, Singapore

In recent years, educators in Singapore regard Singapore Teaching Practice (STP) (launched in 2017) as a model of teaching and learning to guide and strengthen effective teaching. Supporting Self-directed Learning is one of the teaching areas proposed in STP. Students need to progress from being dependent on teachers to teach them, correct them and guide them in all their pursue of knowledge and skills, to be self-directed in their own learning. Being Self-directed learners, they will transit from being engaged in learning to being empowered to acquire new knowledge and skills independently, and to monitor and modify their learning path. This workshop aims to help participants understand the characteristics of learners and learning, the Self-determination Theory (Deci & Ryan, 2008), Staged Self-directed Learning Model (Gerald Grow, 1996) and teachers' role in developing students at the different stage of Self-directedness for their optimal learning. Examples of how teachers in Dunman High School, Singapore, promote self-directed learning in various academic subjects will be shared. The workshop also includes hands-on activities, discussion and reflection for participants to apply their learning into their own school context.

**11:45-12:35**

75679 | *Nurturing Deep Learning with Lego Serious Play*

Anne Trethewey, Bond University, Australia

Sasha Goodwin, Bond University, Australia

This hands-on workshop explores the transformative potential of Lego Serious Play (LSP) as an innovative approach to learning and teaching that transcends traditional barriers to communication and engagement, and has broad applicability from primary schools and universities through to corporate boardrooms. This workshop invites participants to experience firsthand Lego Serious Play's transformative potential to engage learners of all ages, propelling them into the realm of curiosity-driven exploration, critical thinking and collaborative innovation. Through guided activities and reflective discussions, participants will learn how to transform learning using LSP's theoretical foundations and practical applications. Rooted in constructivist principles and powered by the wonder of questions, LSP offers a unique inquiry-based framework to facilitate deep learning and engagement. The LSP method leverages experiential and active learning pedagogies and embodied cognition to provide deep, holistic learning experiences that empower learners to actively construct knowledge, collaborate effectively and navigate complexity with creativity and insight. LSP's generative process offers a systematic and three-dimensional approach that facilitates deep understanding, builds connections and relationships, and uncovers insights. In the LSP method, participants are encouraged to 'think with their hands and listen with their eyes', leveraging the hand-mind connection to increase neural activity to achieve cognitive, emotional, and social engagement. LSP further harnesses the transformational power of play, metaphorical thinking, and collaborative storytelling to nurture dynamic and empathetic learning communities that embrace diverse perspectives and cultivate shared understanding.

12:50-13:40 | Room 701

# Thursday Onsite Presentation Session 3

Education, Sustainability & Society: Social Justice, Development & Political Movements (Workshop)

**12:50-13:40**

73759 | *Creating Social Businesses: Driving Sustainable Development and Educating Change-Makers*

Ujal Ibrahim, University Canada West, Canada

This workshop aims to explore the concept of social business and its significance in addressing and contributing to the United Nations' Sustainable Development Goals (SDGs), as well as the vital role that universities play in fostering and educating future leaders in this domain. Inspired by the concept of social business introduced by Nobel Peace Laureate Professor Muhammad Yunus, this workshop aims to shed light on the intersection between entrepreneurship, social impact, and sustainable development. In today's interconnected world, the SDGs provide a comprehensive framework for addressing the pressing global challenges. Social business plays an important role in advancing these goals by aligning business practices with the principles of sustainability and social responsibility. By examining real-world examples, this workshop will highlight the remarkable ability of social businesses to tackle these pressing challenges. Additionally, this workshop will emphasize the pivotal role of universities in equipping students with the knowledge, skills, and mindset needed to pursue social business initiatives. Universities can nurture students' entrepreneurial spirit and social consciousness by providing platforms for interdisciplinary learning, research, and collaboration. By integrating social business concepts into the curricula, universities can inspire and empower the change-makers, enabling them to drive positive social change. In conclusion, this workshop seeks to foster a deeper understanding of social business as a catalyst for sustainable development. The workshop, through interactive discussions, case studies, and practical examples, aims to inspire academics, practitioners, and students to embrace the principles of social business and work collectively towards a more equitable and sustainable world.

09:00-10:40 | Room 703

# Thursday Onsite Presentation Session 1

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Azizul Yadi Yaakop

09:00-09:25

71922 | *Playing with PhET in Teaching Optics*

Herman Lagon, Iloilo State University of Fisheries Science and Technology, Philippines

This phenomenological study used PhET simulation, a free online application, to observe how students manipulate it to understand optics, an abstract topic in physics. Noting the lived experience of six (6) pre-service science major students for four (4) months, it was found that they were able to navigate the theoretical concepts in light waves, geometric optics, blackbody spectrum, bending of light, molecules of light, and color vision better than having it via the usual lecture-discussions or video presentations. There were technical difficulties encountered along the way—especially in terms of maneuverability, connectivity, and gadget capacity—but when these were eventually managed, they were able to go through the process of manipulating variables in the simulation more instinctively. According to the participants, the use of graphics and intuitive user controls in PhET simulation made learning optics more fun, contextualized, relatable, borderless, and scientific for them.

09:25-09:50

76095 | *The Impact of Game-Based Learning on First-Year Undergraduate Students on Knowledge and Motivation: An Example From the Logistics Field*

Pornthip Ueathamataworn, Rajamangala University of Technology Isan, Thailand  
Theppharat Ueathamataworn, Nakhonratchasima College, Thailand

The paper aims to study the impact of utilizing the learner-centered framework on Game-Based Learning (GBL) on first-year university students. The objectives of the study are 1) Game-based learning can create student learning motivation, 2) Game-based learning can achieve knowledge for the learner. The game implemented in this study is called Beer Game, which is a web-based role-playing simulation of beer distribution in the supply chain. The sample was 42 students who studied the Introduction to Logistics and Supply Chain Management subject. To measure knowledge level, the samples got the tests before and after playing the game (Pre-test and Post-test). To evaluate the learner motivation level, the study used satisfaction questionnaires. The result of the level of knowledge of samples showed that 95.12 percent of total sample students got a better score, on the Post-test than on the Pre-test. The learner motivation survey showed the average ( $\bar{x}$ ) was 4.62/5.00 meaning it was very satisfied with game-based learning. In conclusion, Game-Based Learning (GBL) can create learning motivation and knowledge for first-year undergraduate students.

09:50-10:15

76078 | *AI-Powered Education: Exploring an Educator's Experience Incorporating ChatGPT's into the Higher Education Classroom*  
Allison Segal, University of Utah, South Korea

The landscape of AI-driven writing has ushered in a paradigm shift, evoking a spectrum of responses. From concerns about enabling plagiarism to unprecedentedly fast research, this technological evolution elicits diverse viewpoints. Amidst this discourse, universities' contrasting actions, ranging from ChatGPT, an advanced language model developed by OpenAI, prohibition to its assimilation into undergraduate coding courses, underscore the polarizing nature of these stances. Recent scholarship has underscored that, with proper instruction, AI Writing models can function as both motivational and efficacious tools for learners. However, other recent scholarship highlights the struggles educators face in providing instruction involving AI Writing Models. Therefore, this paper illuminates an instance of ChatGPT's integration within educational frameworks in an undergraduate upper division elective course. The purpose of the inclusion is to offer students proper education on AI Writing Models, so that are motivated to learn to utilize this tool to create more detailed and comprehensive projects and papers. The exposition encompasses comprehensive lesson plans, instructor insights, and student feedback. Ultimately, this work demonstrates one AI Writing Model, ChatGPT's, potential as a versatile instrument, capable of revolutionizing research methodologies, enhancing writing and editing processes, providing customized guidance, and augmenting pedagogical strategies through deliberate curriculum integration.

10:15-10:40

72917 | *Continuance Usage of Web-based Educational Tools: What Can We Learn from Educators in Malaysia?*

Azizul Yadi Yaakop, Universiti Malaysia Terengganu, Malaysia

In recent years, the use of web-based educational tools in Malaysian higher educational institutions is rapidly increasing as they are viewed as highly interactive and user friendly. The salient features of web-based educational tools have evidently contributed to the popularity of digital teaching and learning among students as well as educators. It is not surprising if the use of web-based educational tools may continue to be practiced and gradually replace the traditional pedagogical method in the future among higher educational institutions. This study investigates the integration between two models, which are Task-Technology Fit (TTF) and Technology Acceptance Model (TAM) to understand the continuance usage of web-based educational tools among educators in Malaysian higher educational institutions. An online survey via Google Form was distributed to educators from seven universities in five regions in Malaysia and a total of 305 responses were collected. The findings found support to all of the hypothesized predictions indicating a strong basis for the integrated model in understanding continuance usage of web-based educational tools. Although the shift to online pedagogy especially via web-based educational tools is evidently inconclusive, the emphasis should be put on the usefulness of web-based educational tools rather than other external contextual variables.

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12:50-13:40

73759 | *Creating Social Businesses: Driving Sustainable Development and Educating Change-Makers*  
Ujal Ibrahim, University Canada West, Canada

76133 | *How Urban Social and Cultural Characteristics Influence Urban Transport: Assessing the Subway Network*  
Doahn Lee, University of Utah, United States  
Reazul Ahsan, University of Utah, United States  
Brandy Bippes, University of Utah, United States

Due to negative effects like air pollution, noise, traffic congestion, public affordability, and destruction of natural ecosystems caused by the increase of personal transportation leads to encouraging use of public transportation. Since Seoul has one of the best subway network in the world, this research will analyze socio-cultural characteristics of districts of Seoul and subway passenger rate in those districts to find a correlation between district's characteristics and subway usage patterns of passenger rate per time. The result of understanding the correlation between the district's socio-cultural characteristics and subway usage patterns could help in future planning of subway stations by anticipating the usage of the station in a specific area to provide a better experience in using the subway in Seoul.

76265 | *Exploring the Impact of Matcha on Global Beverage Culture*

Yangyang Liu, Musashino University, Japan  
Kevin Saifon Green, Musashino University, Japan  
Evan Ramli, Musashino University, Japan

Matcha, or "powdered green tea" in Japanese, is usually considered a special sort of powdered green tea produced in Japan (Flint & Kavaliunas, 2017). It has gained popularity overseas and has become not just a worldwide product, but a symbol of Japanese culture. Culture refers to a shared way of thinking, feeling, and behaving among a specific group of people (Jang & Shin, 2019). Expanding matcha to other countries is not just expanding the tea market, but also expanding and spreading Japanese culture. Global companies, such as Starbucks, have added matcha to their menus not just in Japan but also in the United States, Thailand, and Indonesia, among other countries. Matcha appears almost everywhere, from chain bakeries like Arome, supermarkets in department stores, to dessert buffets in five-star hotels (Ho, 2016). China may have the biggest green tea market, but when matcha became widespread, it slowly replaced traditional Chinese tea culture with Japanese tea culture, especially among the youth. The purpose of this paper is to explore how matcha can promote Japanese culture and expand into the global market. The focus is to explore how something like matcha can change an entire culture's position on the global market and how a product that expands worldwide can cause a surge in the market back home. The findings of our research enable businesses to learn from the matcha case to further their cultural understanding and growth overseas.

76239 | *Comparison of Japanese and Korean University Students on Employability*

Taiga Hagihara, Meiji Gakuin University, Japan  
Kanta Ishigami, Meiji Gakuin University, Japan

This survey, on the theme of "employability", investigated the relationship between skills for being employable and university education, and made comparisons between Japan and Korea. In each of the countries, 100 responses were received from undergraduate students, for a total of 200 responses. The first result was that students seemed to have a different view of their grades. In Korea, grades are often emphasized in job hunting, so those who felt that they had acquired the skills necessary for employment during college also had good grades. In Japan, however, the emphasis in job hunting is on "gakuchika", which means what one has done in college. This resulted in a lack of correlation between grades and the feeling of having acquired skills, even though the respondents felt that they needed to obtain a higher level of skills than in Korea. In addition, as a trend, many respondents of both Japan and Korea were consistent in their evaluation of the school in terms of "evaluation of the course", "evaluation of the teachers", and "evaluation of the evaluation system". Therefore, we can guess there was no significant difference between Japan and Korea in terms of evaluation of the school curriculum as a whole.

76248 | *Customer Channel Choice Preference in the Fashion Industry: A Pre and Post-COVID-19 Analysis*

Anzu Tsugahara, Meiji Gakuin University, Japan

The purpose of this study is to discover customers' channel choice preferences between traditional and Internet stores in the fashion industry based on consumer satisfaction, and changes in these preferences before and after the COVID-19 pandemic. Four hypotheses were developed based on literature survey. H1: Consumers who care about the quality of fashion items prefer to interact with store clerks, H2: Customers who care about the quality of fashion items expect more advice from store clerks, H3: Customers who seek advice prefer to interact with store clerks, and H4: Customers who prefer to interact with store clerks are more likely to purchase fashion items in traditional stores are more likely to purchase fashion items at conventional stores have been established, explaining why customers choose conventional stores for their clothing purchases. Based on the four hypotheses, this study administered online questionnaires with Google Forms to college students twice, once during the COVID-19 pandemic and once after the COVID-19 pandemic. The results showed a change in their preferences. During the corona COVID-19 pandemic, there was no causal relationship between interest in product quality and the decision to purchase in a physical store. However, after the pandemic, a causal relationship was found between interest in product quality and the choice to purchase in a physical store. Furthermore, the results showed that those who preferred and enjoyed interacting with store clerks went to conventional stores.

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76247 | *The Relationship Between Musical Tonality and Human Emotion, and How to Apply it to Business*  
Momoka Chigira, Meiji Gakuin University, Japan

The objective of this study is to understand how musical tonality affects human emotions so that music can be used for business. This study was based on the premise that major - key songs have a bright and joyful image, while minor - key songs have a dark and sad image. The emotions of listening to each song were surveyed by using the 5-step SD scale method. The target of this study is all people regardless of age or gender, and a total of 197 samples were collected (female 99, male 98). The results showed that the major - key songs increased joyfulness and comfort, while the minor - key songs increased sadness and anxiety. While this trend was common, there were gender differences in the results. Women tend to change their emotions more easily with music than men. The results mean that stores and events should basically play major - key songs. However, for events that give customers a sense of thrill or fear, minor - key songs that increase anxiety would be useful. In addition, approximately 57% of respondents indicated that the music played in advertisements, stores, or events is frequently or sometimes a factor in their interest in the advertisements, stores, or events. Only 13% of respondents chose "not at all". This suggests that music affects mood, which in turn affects customer behavior and thus employee efficiency in business settings.

76164 | *Effectiveness of Entrepreneurship Education at Faculty of Entrepreneurship, Musashino University: An Interview Survey of Students*

Yohei Takata, Musashino University, Japan

Musashino University's Entrepreneurship Faculty is the first of its kind in Japan. Under the curriculum of "Mind," "Business Promotion," and "Practice," students learn creative thinking skills, PDCA skills, and management skills, and develop practical abilities that can create new value in society. Students at Musashino EMC are growing through entrepreneurship education, and are beginning to apply what they have learned in various phases of society. However, it is not easy to explain specifically why students have achieved such growth. In this study, we will investigate the impact of entrepreneurship education on students from the perspectives of "Knowledge," "Skills," and "Mind," and evaluate each item. We will conduct semi-structured interviews with students enrolled in Musashino EMC and analyze the findings obtained. The Musashino University Entrepreneurship Research Institute and I'mbesideyou, a start-up company specializing in multimodal AI, will jointly conduct video analysis using AI to extract 10 characteristic students from each grade who showed significant changes. Based on the analysis results, we aim to identify the relationship between entrepreneurship education and student growth, and clarify the effectiveness of entrepreneurship education in Japan and how it contributes to human resource development in Japan. The unique feature of this study is that it is based on a case study of Musashino EMC, the first entrepreneurship faculty in Japan, and clarifies the impact of entrepreneurship education on students' knowledge, skills, and mind.

76166 | *Evaluating the Effects of Entrepreneurship Education at Faculty of Entrepreneurship at Musashino University: Musashino EMC – A Video Analysis Using AI*

Tomoya Kasakura, Musashino University, Japan  
Hiroya Takamatsu, Musashino University, Japan

In today's uncertain world, the ability to find pre-determined solutions is less important than the capacity to identify unresolved problems from new perspectives and build effective solutions. Entrepreneurship education programs are being developed considering current social conditions represented by VUCA (Volatility, Uncertainty, Complexity, Ambiguity). Musashino EMC, opened in April 2021 as Japan's first 4-year undergraduate Entrepreneurship Department, aims to nurture entrepreneurship to "shape happiness in the world." Through hands-on curriculum, mentorship by practitioners, and dialogues with entrepreneurs, Musashino EMC strives to empower students to step boldly into the future. This study quantitatively evaluates how students' skills, knowledge, mindset and self-understanding progressed at Japan's first Entrepreneurship Department using AI analysis of online 1-on-1 meetings between teachers and students. The significance lies in the novel target and methodology. Musashino EMC is the first "Entrepreneurship Department" in Japan, providing practical education by current practitioners to nurture entrepreneurial talent. The methodology utilizes AI video analysis by I'mbesideyou, a start-up company specializing in multimodal AI, of 1-on-1 meetings to quantify students' development. We apply Global Entrepreneurship Monitor's framework of Attitudes, Activities and Aspirations to evaluate Musashino EMC's impact. Focusing on Active Score and Speech Speed as proxies for Aspiration and Attitude, this unprecedented analysis of an innovative program demonstrates the promise of entrepreneurship education in Japan.

75242 | *Inclusivity in Higher Education: Gaps in Polytechnic Students' Transitioning to National University of Singapore (NUS)*

Gautham Vijayan Kumaran, National University of Singapore, Singapore

The transition from Polytechnic to NUS is complex, influenced by Singapore's meritocratic ethos deeply ingrained in its education system, which lauds ability-based rewards (Tan, 2008). This system plays an integral role in shaping student experiences and perceptions across different stages of their academic journey. However, in higher education, this system reveals intricate dynamics. While some students traverse this shift seamlessly, others grapple with varied challenges, be it acclimating to academic rigour, integrating within diverse peer groups, or adjusting to an altered learning paradigm. Although higher education voices commitment to diversity and inclusivity, studies such as the MOE Singapore cohort study (2007) and Lim (2021), primarily spotlight the motivations guiding polytechnic students to university. Yet, there's scant comprehensive exploration of transitional intricacies and the structural elements shaping them. Literature suggests periodic skewness in meritocracy, with potential ethnic biases as noted by Teo (2020), and a tendency to sideline vocational education, reinforcing class hierarchies, as articulated by Chong (2014). Through this Poster Presentation, I aim to delve deeply into the polytechnic-to-NUS transition, addressing these research voids. This exploration will pivot around four central themes: skills migration from polytechnic, NUS's institutional support mechanisms, prevailing peer perceptions, and forward-looking recommendations. I anticipate this presentation to unearth refined insights into Polytechnic students' transition experiences at NUS. Potential findings could spotlight institutional or societal barriers, enriching the broader conversation on higher education's diversity and inclusivity. The insights drawn might guide policy

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and practice at NUS and akin institutions, advocating for more inclusive environments.

76226 | *A Reconsideration of Desert Kites: Communal Hunting and Rituals*  
Jawad Alazzeh, King's Academy, Jordan

Desert Kites are visually stunning, large, prehistoric stone structures, with walls extending up to tens of kilometers in length. The kites were built with local stones by pastoral communities, dating to the Neolithic and Chalcolithic periods (8,000-4,000 BCE), and thought to be used for mass hunting. Historically, desert kite structures identified in Jordan were concentrated in the north-eastern harra. The absence of kites within the south-east, given the continuity of settlements, was considered an anomaly. The southern kites were only recently identified, when the largest and oldest kites known were discovered within the hamada. In 2021, an excavation revealed a ritual installation, including an altar and hearth, attached to a desert kite, including two stelae of human figures, as well as etched scaled diagrams of other desert kites; offering the potential to expand our understanding of early Levant pastoral nomadic groups. With 6,000 kites globally, the new Jordanian kites have not yet been contextualized in the global literature, nor have discussions previously included aspects of rituals and worship. My research will propose a new kite classification typology and reconsider the new kites and their associated hunting communities in terms of temporality, use, tradition, and rituals. My research relied on a survey of aerial, satellite and 3D-imagery, as well as a literature review. The poster will link shape and geographical distribution to early desert communities and consider the new kites as part of a larger, deeper system in the region, negotiating topography, climate and natural and animal resources.

67843 | *Perception of FPT Student on Esports and Capability of Using Esports for Developing Soft Skills*  
Thi My Danh Le, FPT University, Vietnam  
Phuoc Dinh Kien Nguyen, FPT University, Vietnam  
Tran Duyen Duyen Bui, FPT University, Vietnam  
Thanh Hoang An Le, FPT University, Vietnam  
Thanh Long Truong, FPT University, Vietnam  
Xuan Loc Nguyen, FPT University, Vietnam

Esports research has grown to become an area of study spanning seven academic disciplines such as business, sports science, cognitive science, informatics, law, media studies, and sociology. Despite the criticism aimed at the negative effects of excessive gaming, it is indisputable that GenZ pays great attention to and participates in Esports. Given this trend, we employ a survey to investigate students' perceptions and attitudes towards the growth and participation of Esports. Additionally, this research is based on the Theory of Planned Behavior, which is shaped by an individual's attitude (the attribute of a particular behaviour), subject norms (whether a significant person would approve or disapprove of the behaviour), and perceived behavioural controls (anticipated obstacles that may inhibit behaviour), to analyze the interviewed data. This quantitative study is expected to reveal the views of FPT Academics and may capture the beliefs and perceptions of the participants toward Esports to offer recommendations and contributions for a better supportive and sportive system for the FPT Academics players specifically and the Esport gamers in general. This paper also finds ways to mobilize esports in developing necessary soft skills for undergraduate students.

76288 | *Integrated Writing Planning System*  
Hyunwoo Kim, University of Utah Asia Campus, South Korea

The study emphasizes the need for an integrated writing planning system for efficient, more persuasive writing that fulfills the demand for different types of writing. By listing, arranging, organizing, and classifying numerous methodologies of writing, users may find a more useful system customized to their individual writing needs as they plan a writing project. Many university writing methodologies are presented without an explanation about when they should be used. University writers may be confused whether those methodologies are irreplaceable and non-interchangeable with other methodologies; it may be unclear whether methods can be combined or must be used independently. This research aims to arrange numerous writing methodologies by classifying the method depending on the size of the concept, and applicable scale, to provide one integrated writing planning methodology depending on the process of university writers. This research seeks to organize 30+ methodologies in writing into 3 sections. 1) The grand principle - Globally used, irreplaceable method to write persuasive text, 2) Efficient principle - Not mandatory, but still crucial for readable text, 3) Option principle - Interchangeable each other, selected depending on the preference of the writer's personality or cultural background. This research analyzes best practices in writing methodologies and includes interviews with university writing professors from an American university in South Korea.

75259 | *The Interplay of Identity Construction and Motivational Development in Chinese Heritage Language Learning: Confrontation Between Individual Agency and Hegemonic Social Discourse*  
Haifeng Li, University of Manchester, United Kingdom

This study explores the intricate relationship between identity construction and motivational development in Chinese Heritage Language (CHL) learners. Drawing on the narratives of three CHL learners in the UK, the research employs a post-structuralist perspective and the Heritage Language Identity Development Model (HLIDM) to analyze the dynamic interplay of personal histories, spatial contexts, and relational experiences in shaping learners' identities and motivations. The findings underscore the pivotal role of accepting one's Chinese identity in shaping motivations to learn CHL. However, this acceptance is not passive but emerges from active societal participation and the exercise of individual agency. The study also highlights the significant influence of societal hegemonic discourses, particularly those related to authenticity, which can impact learners' motivations negatively. The research concludes by emphasizing the need for a more inclusive understanding of Chinese identity and a challenge to dominant discourses on authenticity to support effective CHL learning. The findings offer valuable insights for educators, policy-makers, and researchers in the field, suggesting further exploration of strategies to

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help CHL learners overcome socially hegemonic discourses and shape accurate and clear identity constructs.

75703 | *The Role of Children and Childhood in Georg Büchner's Woyzeck*  
Helen Chen, University College London, United Kingdom

In contrast to the Enlightenment's ideal of evolving humanity through rational thought, Georg Büchner's unfinished social drama *Woyzeck* sheds a pessimistic light on worldview. Employing a multifaceted approach that amalgamates close-reading, literature review, and critical analysis, this essay scrutinises the significance of children and childhood within the narrative. The central contention posits that children symbolise a poignant testament to the ceaseless recurrence of human tragedy. The narrative's underdeveloped fairy tale plot and the pervasive use of negative imagery foreshadow the futility of the orphan's attempt to break free from the inexorable cycle of suffering—a futility mirrored in subsequent generations. Even *Woyzeck* and Marie, driven by their unwavering sense of familial duty, meet a fate of desperation. As this exploration unfolds, it becomes evident that the affliction of doomed destiny spares no one, perpetuating itself in various forms. *Woyzeck*'s son is naturally bound to tread the same path as his parents, while other children remain trapped within a perpetual cycle of retribution, reflecting the law of the jungle. Much like the enduring struggles of humanity in the play, the portrayal of similar issues including the unchanging social classes in developed societies reflects the challenges that persist in our modern world.

76165 | *Representation of Entrepreneur in Japanese TV Drama*  
Kaho Taguchi, Musashino University, Japan  
Hiroya Takamatsu, Musashino University, Japan

Amid intensifying social issues like declining birthrates and an aging population, entrepreneurs are attracting more expectations and attention as part of potential solutions. Analyzing how entrepreneurs have been depicted in Japanese TV dramas over time can elucidate connections between media representations of entrepreneurs and broader social and cultural trends. The originality of the subject matter and uniqueness of methodology give this research its distinctiveness and significance. To my knowledge, no existing research analyzes media portrayals of entrepreneurs, a globally prominent figure, in Japan, where nurturing venture businesses is considered difficult. This study examines representations of entrepreneurs in Japanese TV dramas from 2000 to present, before and after 2005 when Livedoor's attempted takeover of Fuji TV brought major attention to entrepreneurs and startups in Japan. By revealing how depictions of entrepreneurs have evolved, this research attempts to elucidate linkages between media portrayals and sociocultural contexts surrounding entrepreneurs. The novelty lies in applying media representation analysis to understand entrepreneurs in Japanese society. Tracing changing media representations over two decades offers an innovative window into how entrepreneurs gained prominence despite presumed difficulties fostering startups in Japan. This historically-grounded media narrative analysis promises new insights on entrepreneurs, media, and culture.

73594 | *The Comparison of Memorization Skills and Its Mental and Emotional Influence Between Dancers and Musicians*  
Ronan Santos, Enderun Colleges, Philippines  
Esther Enkhbayar, Enderun Colleges Senior High School, Philippines  
Chevy Tan, Enderun Colleges Senior High School, Philippines  
Nicole Lorraine Sagovac, Enderun Colleges Senior High School, Philippines

The art of memorization skills is one critical ability that completes the complexity of being a dancer and a musician. Constant challenges contribute to developing strong memorization skills in these artistic performers, yet the extent of similarity and difference between these groups remain debatable. This study compares the memorization skills between dancers and musicians while investigating how their memorization skills affect their mental and emotional state, thereby shaping their artistic performance. With a quantitative research design, this study used a Likert scale questionnaire with three sections (I. Memorization Skills, II. Emotional Effects, III. Mental Effects) to collect data online from a purposive non-probability sample of 30 participants aged 13-19. The collected data underwent three studies, where the first two studies analyzed the correlation between memorization skills and (1) emotional well-being; and (2) mental skills, while the third study focused on hypothesis testing. Through Spearman's rank-order correlation Test, Study 1 revealed a p-value of .037, which indicates a significant relationship. Study 2 on the other hand, presented no significance with a p-value of .400. Furthermore, establishing a p-value of .500, Study 3 underwent a Two-sample t-Test and provided a conclusion of no significant difference in memorization skills between dancers and musicians.

76287 | *Thailand's Next Generation Hope for a Better Country: What Do They Expect from the New Administration?*  
Casey Akagawa, Musashino University, Japan

Following a tumultuous election season in Thailand this year, the country is on the brink of welcoming a fresh administration along with a new prime minister. The voter turnout surpassed 75.71%, marking the highest participation rate in the last ten years. A significant portion of this turnout was composed of Millennials and Gen Zs, who made their voices heard through their votes. Their resounding endorsement favored the notably progressive Move Forward Party, while simultaneously expressing a clear rejection of the traditional conservative and military establishments. Despite the public's unmistakable stance, the journey towards establishing the new government has been marred by challenges and irregularities, leading to a result that does not align with the choice of the Thai populace. This discrepancy stems from the Thai constitution's provision that the governing party is determined by the largest coalition formed within the national assembly, not necessarily the party that won the democratic electoral process. Consequently, Thailand finds itself with a new administration that lacks the endorsement of the majority of voters. This situation prompts the question of what the Thai citizens anticipate from this new government over the next four years and what vision they hold for the future of their nation. This study will delve deeply into the intricacies of the recent election, investigating how Thailand navigated its way into the current political turmoil, and will explore the aspirations and ideas that the Thai people have for their newly established administration.

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75668 | *Cyber Bullying Behavior and Personality Types of Teens*

Phakhawan Wannasirikul, Singapore International School of Bangkok, Thailand

Feixue Luo, Singapore International School of Bangkok, Thailand

Uden Wangmo Wangyal, Singapore International School of Bangkok, Thailand

Because social media and devices are a big part of almost every teenager's life, it has opened more doors to cyber cases such as bullying. This study aims to find out if teenagers who have done cyberbullying in the past (CB) would have a higher score in the Dark Triad (Machiavellianism /Psychopathy /Narcissism) test (DT) than those who have not done cyberbullying (nCB), and to find if there is a relationship between the perceived normalcy of Cyberbullying (PNCB) and the frequency of observed Cyberbullying behavior (FOCB). The researchers administered an online survey that included the Dark Triad personality test (DTPT) and the Cyberbullying survey to thirty-seven (37) respondents, through opportunity sampling. Results show that there is no significant difference ( $p > .05$ ) between CB and nCB in terms of scores in DT, for each of the subtype (M/P/N). However, there was a significant relationship between PNCB and FOCB ( $r = .37$ ). This suggests that personality traits (M/N/P) may not be ideal in identifying or predicting cyberbullying behavior, but what relates to frequency of CB is if it is perceived to be normal within the community. Thus, an ideal action for schools to fight cyberbullying is to de-normalise it.

75820 | *Gender-and-Color Matched Apparel Advertising, Likelihood of Purchase and Estimated Fair Price: A Mixed Methods*

Daryl Hsu, Singapore International School Bangkok, Thailand

Purchasing decisions (PD), especially those about one's clothing, can be personal and well thought of, and people may be susceptible to having their PD influenced by external factors, including gender stereotypes. The study aims to find out if stereotypical colour matching (male participant and blue clothing in the ad, female participant and pink clothing in the ad) influences purchasing and pricing decision (PrD). It also asks if there is a relationship between likelihood of purchase (LOP) and estimated fair price (EFP). And through open-ended questions, it also aims to find the different themes found among those indicating very low or very high likelihood of purchase.

The study is a descriptive comparative and open-ended online survey. The research used opportunity sampling and the participants were seventy-six (76) adolescents and adults, ages ranging from 15-25 years, who are current students (or graduates) of international schools in Thailand. The study did not find any significant difference between colour-matched and colour unmatched participants with regards to LOP and EFP ( $\text{sig.} = .405$ ,  $p > .05$ ). However, there was a positive correlation between LOP and EFP ( $r = .326$ ). Lastly, content analysis showed that high LOP may be influenced by perceived quality, appreciation for the model, and colour preference (regardless of gender).

76228 | *Hookup Culture on Chinese College Students*

Yaran Tang, Wenzhou-Kean University, China

The hookup culture is prompted by the gap between earlier physical maturity and lower marry willingness. Hooking up is popular in Western countries among college students. However, compared with Western countries, Chinese have a lower tolerance for sex topics and avoid discussing them. This study researched the behaviors and attitudes of Wenzhou-Kean University students about Hook-up through online questionnaires and face-to-face interviews. The study found that about half of students have experienced hookups. By looking for correlations in the data, and combined with the specific information from the interviewees, the researchers concluded that hooking-up impact the student's sexual behavior and intimate relationship in the future. However, hookup has a greater negative impact on female students both mental and physical. Besides, students' hookup behavior will be influenced by interaction with each other. By comparing research in Western countries, the researchers also found that Chinese students would conceal their hookup experience to a greater extent, and consider it shameful. There is little research on hookup culture in China. Therefore, this article can give a glimpse of China's hook-up culture, and make the reference and contribution to the research in this field. Furthermore, it also plays an important role in the theme of teenagers' mental health and intimate relationship.

76898 | *Japanese Kei Car*

Chisato Kuroiwa, Chuo University, Japan

In Japan, "kei cars" (small engine vehicles) are an indispensable part of daily life. And the Japanese small engines used in that cars are probably the best in the world. According to the data, in 2021, the most popular car in Japan was Honda's N-BOX, with 191,534 sold. Why do Japanese like this car? Because Japan is the only country in the world where the concept of a "kei car" is defined by law. There are several other advantages to using kei cars in Japan. The land is small, people do not travel long distances, and the roads are narrow. In other words, kei cars are essential in Japan. But other countries did not develop mini engines because these conditions did not exist. Japan is the only country that has this special and technically demanding vehicle. I use data from reviews, web sites of Japanese car companies, and previous studies. My research will reveal how this car technology, one of Japan's most outstanding technologies, was developed. In addition to the kei cars, Japanese car technology is among the best in the world. I think it is because of the existence of the conditions mentioned above that the development of small cars and engines has been promoted. And the conditions lead to the current technology and Japan's position in the world regarding car technology.

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76500 | *Archival Study on the Student Engagement of Selected College-Based Organizations from Community Development Projects in the University of Santo Tomas*

Jan Megan Soriano, University of Santo Tomas, Philippines

This paper will particularly analyze the student's engagement in student organizations at the University of Santo Tomas based on the archival documents of community development projects from the UST Simbahayan Community Development Office, which is fairly significant. Using the qualitative data collected through secondary data of community development terminal report papers of the student organizations specifically archival documents from the UST Simbahayan Community Development Office, the paper shall analyze the student engagement of the student organizations with an archival analysis, which is quite significant. Furthermore, this paper proposes to definitely argue through the theoretical orientation of Astin's Involvement theory that comprises (1) inputs; (2) referring to the "environment" of students, all experience from their stay in the college university; (3) outcomes, which characteristics, skills, attitudes, values, and beliefs of a student acquired they essentially have completed their college education (Michigan State University, 2021). Thus, this paper specifically aims to contribute to informing College students and further expand the literature regarding the nature and essence of student organizations and directly to the UST Simbahayan Community Development Office to further basically see the student engagement in the community development projects that essentially have been implemented.

76289 | *Comparing Relevance of PTOs and Vacations to the Employees' Productivity in Japan and Overseas*

Benedict Margarejo, Musashino University, Japan

Tasnim Jannat Ramia, Musashino University, Japan

This study includes the relevance of paid time off (PTOs) and vacations in relation to employee productivity, focusing on a comparative analysis between Japan and overseas locations respectively. Recognizing the significance of work-life balance and employee well-being, the research aims to investigate how these two forms of time off influence employee productivity in distinct cultural and organizational contexts. This study intends to find parallels and variations in the effects of PTOs and vacations on employee productivity in Japan and abroad by a thorough analysis of academic literature, cross-cultural studies, and empirical data. The data implies that the primary reasons for taking PTO across both Japan and other countries include going on vacation, recuperating well-being, and personal experiences. The emphasis on using PTO before expiry appears to be more prevalent in Japan compared to other countries. The study's conclusions shed light on the potential advantages and drawbacks of paid time off (PTO) and vacations by highlighting how these policies may affect productivity, drive, job satisfaction, and general health of employees. The study also considers the implications for productivity enhancement and the promotion of work-life balance as it explores the role of organizational policies and practices in facilitating effective use of time off. The findings have implications for employers, decision-makers, and human resource specialists when developing strategies and policies that maximize the use of PTOs and vacations, thereby promoting employee productivity and well-being in a variety of work environments.

76023 | *The Effect of Computer-Based Teaching Methods on Students' Learning Motivation in Chinese Primary School*

Hao Fei, University College London, United Kingdom

This paper proposes a re-examination of teaching methods and how early childhood education programs can help promote motivation among primary school students. A suggestion put forth in this paper is to integrate computers into classroom, since multimedia offers an interactive component that frees students from passive acceptance of knowledge, thereby empowering them to act as learners, breaking the traditional teaching method that only imparts knowledge to students. The purpose of this paper is to explore how computers challenge traditional teaching methods in Chinese primary schools by using literature-based research method. This paper reviews three strengths in which computer-based teaching methods affects students' motivation. Firstly, multimedia resources present knowledge in different ways, which not only clarifies complex concepts but also promotes content memory, thereby improving their learning motivation. Secondly, as a medium, computers can shorten the distance between people and make them more cohesive (Garrison and Vaughan, 2008). Therefore, they can supervise each other online and provide timely feedback and help, thus increasing enthusiasm towards learning. Finally, computers provide unlimited learning resources and provide students with more educational assets. Students can easily discover their own learning interests through computers, hence, boosting their learning motivation. The reason why learning motivation is important is that it is a type of internal driving force of people, which can provide students with lasting motivation, help them achieve academic success, and will affect their life. The paper concluded by making limitations of computer-based teaching methods to reflect on its effectiveness.

10:55-12:35 | Room 703

# Thursday Onsite Presentation Session 2

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Daniel Hooper

10:55-11:20

74832 | *"I Can Easily Switch to the Kazakh Language, also to the Russian Language": Reimagining Kazakhstani CLIL Implementation*  
Michelle Bedeker, Nazarbayev University, Kazakhstan

There is extensive CLIL research on stakeholders' practices, integration of content and language, and pedagogies. However, limited studies report on teachers' pre-existing knowledge before CLIL implementation and how it influences their classroom pedagogy. Using a third space frame, this study examined CLIL implementation in Kazakhstan. It included 15 science teachers who teach science through the English medium of instruction (EMI). A hybrid coding strategy was followed to analyze questionnaires, teachers' science lessons, multimodal teaching-based scenarios, and semi-structured interviews. Our findings revealed that teachers' CLIL implementation was guided by their 1) hybrid beliefs about scientific knowledge and learning, 2) humanizing pedagogy, 3) shift to constructivist science pedagogy, and 4) hybrid linguistic stance. We conclude that a third-space perspective diverts the gaze from CLIL teachers' challenges to illuminate the entanglement of teachers' epistemic stance, PCK, and linguistic stance as emergent discursive practices when policy borrowings connect global and local epistemologies.

11:20-11:45

73826 | *Perceptions of Language Teacher Preparedness for Hyflex Learning*

Enrico Rosales, La Consolacion University Philippines, Philippines  
Jacquie Bamba Zamora, La Consolacion University Philippines, Philippines

Hyflex learning is defined as combining instructional modalities and methods into one class. It is also known as hybrid instruction, where the teacher chooses which material to teach face-to-face and which to provide online. Hyflex learning is also one of the learning modalities pushed by the Philippine government as it moves the educational setup from online distance learning to hybrid-flexible setups. The present study examines the challenges of teachers in preparing for Hyflex learning through a Principal Components Analysis (PCA). Having sufficiently passed the threshold assumptions (KMO = .918; Bartlett's sig = .000), data was subjected to PCA through Varimax rotation using IBM SPSS Version 25. Nine components emerged in the PCA, including: learner choice, equivalency, reusability, technology, perceived language teaching efficacy, technology accessibility, enabling technology, perceived self-efficacy, and off-class consultation. Findings of the study help inform future directions for verifying the model through other multivariate methods (i.e., CFA), and of insights in preparing teachers for teaching and learning post-COVID-19.

11:45-12:10

73939 | *An Action Research on the Integration of Pinyin Instruction in Chinese Language Teaching Through the Use of Object-Based Teaching Materials*

Yeh Ting-Yu, Chung Yuan Christian University, Taiwan

In response to the digitalization of education and COVID-19, Mandarin language teaching is adapting to new classroom norms and blended learning. This study uses action research to assess the feasibility of using object-based digital materials on interactive whiteboards in Chinese language teaching. The study uses digital Chinese Pinyin materials compiled by Li Jirong (2022) and transformed via the mvViewBoard software. Participants are adult learners with no prior Chinese knowledge, from a Mandarin Learning Center at a university in Taiwan. The research involves classroom observation, video recording, and teaching notes to analyze how teachers use interactive materials to enhance classroom interaction and guide learners to master Chinese Pinyin quickly. Post-study, participants will complete a Likert scale feedback questionnaire. The results, analyzed using sequential analysis, lag sequential analysis, and Kappa test, will provide insights into learner outcomes, teacher-learner interaction, and interactive whiteboard usage, contributing to the field of digital Chinese language teaching.

12:10-12:35

72195 | *Fostering Student Leadership Through "Landscaping" the Classroom*

Daniel Hooper, Tokyo Kasei University, Japan

Creating an egalitarian language classroom where the voices of all participants are respected and student leaders are fostered is a challenging endeavor. In addition to institutional policies that may reinforce traditional top-down power dynamics, educators may also need to address deficit beliefs that learners have internalized as "common sense," such as native-speakerism (the belief that language learning should be based on a "native" standard and is therefore best taught by "native speakers" of the language (Lowe, 2020)) or the infallibility of teachers. In this presentation, the presenter will discuss a number of pedagogical interventions that can help to relevel or "landscape" power dynamics in the language classroom. These practical interventions - action logging, near-peer role modeling, and social testing - are designed to foster learning partnerships with students that catalyze a continuing cycle of empathetic and humanistic behavior and individual/group empowerment. The presenter will outline the theoretical underpinnings of these teaching techniques, share relevant insights from existing research on their use, and discuss some practical considerations relating to their effective implementation in the language classroom.

12:50-14:05 | Room 703

# Thursday Onsite Presentation Session 3

Higher Education

Session Chair: Edward Panganiban

12:50-13:15

73903 | *Exploring the Characteristics and Potential of International Development Studies in Japan: Perspectives of Chinese Students*

Muyun Wang, The University of Tokyo, Japan

Jingyuan Wu, The University of Tokyo, Japan

Tingyu Hou, Ochanomizu University, Japan

In the past decade, there has been a significant expansion of knowledge sharing in the field of international development studies (IDS) by both Japan and China. However, little scholarly attention has been paid to the experiences of Chinese students studying IDS in Japan, despite their increasing presence. To bridge this research gap, we conducted semi-structured interviews with nine Chinese (former) students pursuing IDS-related majors at Japan's universities and are members of the Japan Society for International Development (JASID). By comparing and analyzing the experiences of these students from diverse backgrounds, we aim to gain a comprehensive perspective on the characteristics and possibilities of IDS within an Asian context. Our findings reveal that IDS education in Japan is characterized by a lack of systematicity and contingency. Despite the intensifying competition in the realms of foreign aid and academia, Japanese IDS has not yet become a mere byproduct of geopolitical changes in the global order. The Japan-China relationship has had minimal influence on the study experiences of Chinese students in Japan. Instead, IDS in Japan emerges as a field that fosters self-reflection and reevaluation of the concept of "development" for Chinese students. The enduring trust established within the Japanese education system plays a significant role in facilitating the holistic personal development of students, positioning them as the next generation of knowledge producers.

13:15-13:40

74936 | *Narrowing Down the Intellectual Capabilities/Political Knowledge in Afghanistan's Higher Education*

Mohammad Ajmal Behmanish, Technical University of Darmstadt, Germany

The study explores intellectual capabilities and/or knowledge acquisition exercises particularly the knowledge of politics in Afghanistan's higher education. It explicitly interrogates the factors that affected and conditioned the intellectual capabilities and/or political knowledge of the students between 2001 to 2021 in Afghanistan. The study has opted for a qualitative method of semi-structured interviews with several former and present political science lecturers and students in Afghanistan. The study has adopted the nonprobability methods of purposive and snowball/referential sampling for data collection and deductive coding for data analysis. The analysis determines that the science of politics has played a passive role in socio-political circumstances in Afghanistan and has been subservient to the sociocultural structures and belief systems of the country. Thereby, it failed to function as an intellectual and reformist institution paving the knowledge acquisition exercise and/or nurturing intellectual capabilities. Given its passive and subservient nature, on the one hand, the knowledge of politics at the universities is compressed and bound by the dominant structures and belief systems such as ethnicity and radical Islamism, and on the other hand, the traditional and unqualified aspirations and mentalities perpetuated and dominated the political circumstances. Consequently, exploring the conditioning and shrinking factors of political knowledge/intellectual capabilities in Afghanistan's higher education led the study to possible arrangements/reforms in the organization of political knowledge to repel the domination of sociocultural structures and belief systems, and equip the students with relevant and contextual knowledge of politics and form their intellectual capabilities.

13:40-14:05

74741 | *Higher Education Research and Innovation for Sustainable Development Goal Quality Education*

Edward Panganiban, Isabela State University, Philippines

Ricmar Aquino, Isabela State University, Philippines

Jeoffrey Lloyd Bareng, Isabela State University, Philippines

Jose Gallena Jr., Isabela State University, Philippines

Orlando Balderama, Isabela State University, Philippines

The Sustainable Development Goals (SDGs) Agenda of the United Nations (UN) adopted by world leaders in 2015 include poverty eradication, climate change mitigation and universal access to education. The UN 2030 Agenda acknowledges Quality Education (SDG#4) as a means for achieving the remaining SDGs, with sustainability as a goal for Quality Education. This paper aimed to establish the application of Information and Communication Technology (ICT) in achieving the SDGs which were declared by the United Nations in 2015 as binding for all nations of our planet addressing both developing and developed countries. ICT plays a significant role if the SDGs should be achieved as projected in 2030. The impact of ICT on sustainability is two-fold. On the one hand there might be negative effects on sustainability such as the generation of electronic waste. However, ICT is definitely an enabler to more efficient resource usage, education and business operations which is critical success factor for achieving the SDGs. Specifically, this project established a portal system that determines the status of quality education in Isabela State University – Main campus, as its pilot implementation site, using the instrument indicated in the SDG 4 in the Times Higher Education Impact Rankings methodology. The portal is used to gather data for the last 3 years about Research on early years and lifelong learning education, Proportion of graduates with teaching qualifications, Lifelong learning measures and Proportion of first-generation students. These are the key performance indicators for the University to meet the standard of quality education that was based on the instrument for Sustainable Development Goal 4 - Quality Education.

14:20-16:00 | Room 703

# Thursday Onsite Presentation Session 4

Challenging & Preserving: Culture

Session Chair: Anis Suria Zainudin

14:20-14:45

73697 | *Critical Discourse Analysis of Teacher's Green Discourse: An Input for Eco-Pedagogical Strategies*  
Jay Mark Santos, La Consolacion University Philippines, Philippines

This study aims to analyze the green discourses on the integration of environmental education in teaching English written by teachers through critical eco-linguistics analysis. The study utilized the critical discourse analysis research design, which is a combination of the sociological-empirical approach and critical discourse analysis as the critical approach. It investigates not only the linguistic aspects but also the discourse practice, intertextuality, and experiences presented in the ten (10) green discourses written by the teachers. The findings revealed that teachers used material and mental processes in their green discourses to build teachers' power or role in integrating environmental education in teaching English. In contrast, relational and existential processes allow them to share their beliefs and to express their judgment, understanding, and preferences in integrating environmental education into teaching English. Moreover, they understand that teaching-learning activities in English class are not limited to teaching theoretical, grammatical and linguistic aspects; it also needs the integration of environmental education. This shows that despite their experience of challenges and limitations in integrating environmental education into teaching English, they still managed to integrate environmental education into teaching English using different methods. Finally, eco-pedagogical strategies in English language teaching adapting the neo-model of Environmental Education in the Philippines and the National Environmental Education Action Plan were proposed to address the concerns in integrating environmental education in teaching English.

14:45-15:10

75908 | *Disaster Risk Reduction and Management Program of Imus National High School, Department Education, Schools Division Office of Imus City*  
Josephus Perseus Banaag, Schools Division Office of Imus City, Philippines  
Riza Garcia, Schools Division Office of Imus City, Philippines

The important role of schools in disaster management brings this study to the forefront, thus the study was conducted to describe and evaluate the School Disaster Risk Reduction Management Program (SDRRMP) of Imus National High School (INHS). The descriptive-evaluative design with the administrators, non-academic personnel, teachers, and Grade 10 students was adopted. Data gathered through questionnaires, interviews, and documents were analyzed with the use of descriptive statistics, and tests of relationship, and difference. The goals and objectives of the program directed its implementation. The inputs are available at a Very Adequate level while the different activities were implemented to a Great Extent. Outputs were produced to which the participants are very satisfied while Outcomes show the attainment of goals and objectives to a Great Extent. Significant positive relationships were noted among the adequacy level of inputs, implementation level of activities, and satisfaction with the different outputs. Significant differences were observed in the adequacy of inputs, the implementation of activities, the satisfaction with outputs, and the program outcomes reflected the attainment of goals and objectives. Notable concerns on project implementation include adapting to the new learning modality, checking equipment, buildings, and facilities, student involvement, the integration of DRRM in learning areas, and curriculum enrichment.

15:10-15:35

74264 | *A Study on the Integration of Virtual Reality into Elementary School Marine Disaster Prevention Curriculum for Students' Marine Disaster Prevention*  
Zeng Sheng-Hong, National Taiwan Ocean University, Taiwan  
Chou Ya-Chien, National Taiwan Ocean University, Taiwan  
Chang Cheng-Chieh, National Taiwan Ocean University & Taiwan Marine Education Center, Taiwan  
Tsai Liang-Ting, National Taiwan Ocean University, Taiwan

The purpose of this study was to investigate the effects of marine disasters on knowledge, skills, and literacy of upper elementary school students in Keelung City under the natural occurrence factors and the implementation of different teaching methods (virtual reality integration learning and traditional audio-visual learning). This study adopted the "unequal group pre-test-post-test design" approach in the quasi-experimental research method to conduct experimental teaching. Two classes were used as the experimental group, and the other two classes were used as the control group to implement the "lecture-based curriculum learning". The teaching content was based on understanding offshore and offshore currents as a response to natural hazards in the ocean, and the theme of marine disaster prevention literacy education. The teaching strategy adopts 5E inquiry-based and experimental teaching. The reliability and validity of the assessment tools and the expert content were analyzed through data collection and statistical analysis. The expected results of this study are as follows: 1. the "Virtual Reality Course Learning Group" of marine disaster prevention knowledge, skills and literacy will be significantly better than the "Lecture Course Learning Group". 2. The results of the pre and post-implementation questionnaires showed a significant improvement in the marine disaster preparedness of all students. 3. Based on the conclusions of the study, we propose and summarize the relevant recommendations and give specific suggestions for the future integration of virtual reality into the marine disaster prevention curriculum of elementary schools and for the establishment of marine disaster prevention education and teaching for students.

15:35-16:00

74473 | *Ustaz Hanafi: A Transformative Figure in Malay Silat Through the Education of the Persatuan Seni Silat Cekak Malaysia (PSSCM)*  
Mohd Azuwan Maoinsar, Universiti Teknologi Petronas, Malaysia  
Abdul Hazim Abdullah, Universiti Teknologi Petronas, Malaysia  
Anis Suria Zainudin, Universiti Sultan Azlan Shah, Malaysia

Ustaz Hanafi, the late Founder, President, and Guru Utama of the Persatuan Seni Silat Cekak Malaysia (PSSCM), was a well-known figure among the members of the organization and the Malay martial arts community. This study aims to examine Ustaz Hanafi's character as a silat master in PSSCM. Interviews were conducted with 15 active members who had studied under Ustaz Hanafi during the early days of PSSCM. The findings revealed that Ustaz Hanafi possessed a firm and serious demeanor as a silat master, which was crucial for effectively transmitting and preserving the knowledge of the martial art. Despite the organization being in its infancy in Kuala Lumpur, Ustaz Hanafi's compassionate nature as a teacher fostered a strong bond with his students, ensuring their continued dedication and participation in PSSCM. The philosophy of Ustaz Hanafi's silat education aimed to cultivate individuals who would contribute to their religion, nation, and country. His distinctive character set him apart from other contemporary silat masters and allowed him to transform many troubled individuals within PSSCM into better versions of themselves. This paper explores in detail how Ustaz Hanafi's character contributed to the growth and development of PSSCM as a prominent martial arts organization. His leadership, combined with his strict yet caring approach, propelled the organization forward and established its reputation as it stands today. Ustaz Hanafi's legacy as a silat master continues to inspire and shape the values of PSSCM, fostering a community of dedicated practitioners who strive to make a positive impact.

16:15-17:55 | Room 703

# Thursday Onsite Presentation Session 5

Challenging & Preserving: Culture, Inter/Multiculturalism & Language

Session Chair: Jose Macatangay

16:15-16:40

74053 | *Challenges in Practicing Intimacy and Maintaining Close Friendships Across Geographical Boundaries: A Study of International Students at Universiti Sains Malaysia*

Nur Hafeeza Ahmad Pazil, Universiti Sains Malaysia, Malaysia

Intan Hashimah Mohd Hashim, Universiti Sains Malaysia, Malaysia

Julia Abyana Aziya, Universiti Sains Malaysia, Malaysia

As friendship is a significant aspect of human nature, international students who study abroad are bound to experience a different social setting and might encounter changes in their friendship practices, especially with their close ones. Hence, the characteristics or qualities for maintaining close friendships despite being geographically separated and having limitations on practising intimacy were explored in this study. By using semi-structured in-depth interviews with 14 postgraduate international students from various countries studying at Universiti Sains Malaysia, the findings revealed several key elements that contribute to the formation of close friendships. These include trust, similarity, dependability, and support. Through a sociological lens, the study delved deeper into how these characteristics emerge from the participants' friendship experiences. This study also highlights the challenges of intimacy practices among international students in their long-distance close friendships. By examining the ways in which intimacy is understood and cultivated in these relationships across different culture, the research provides valuable insights into the dynamics of maintaining close friendships during temporary periods of mobility abroad, as well as throughout one's lifetime.

16:40-17:05

75681 | *A Study on Japanese Cultural Education and Intercultural Sensitivity Enhancement Using the Metaverse*

Eunyoung Kim, Pusan National University, South Korea

This study investigates the potential of utilizing a metaverse environment for teaching Japanese culture and enhancing intercultural sensitivity. Given the recent emphasis on metaverses in education, this research delves into their potential to fulfill diverse educational objectives. The study examines the learning outcomes of a Japanese cultural class conducted through a metaverse. The participants are 46 students majoring in Japanese language at a private university in Busan, South Korea, all of whom are new to metaverse-based learning. Among them, 31 students are pursuing a Japanese language major, while the remaining 15 have Japanese language as a minor. Employing assessment tools developed by Chen & Starosta (2000), the study carries out pre- and post-assessments, followed by quantitative analysis. The findings indicate that mutual confidence and enjoyment significantly contribute to interaction effectiveness. Qualitative results confirm that the sense of presence and immersion in the metaverse environment enhances the educational experience, sparking interest in and curiosity about Japanese culture, and reducing cross-cultural interaction anxiety. These results suggest the metaverse's potential as an effective tool for Japanese cultural education. The metaverse's virtual environment stimulates learners' curiosity and interest by offering interactions and experiences beyond real-world limitations. This study explores the educational potential of metaverses and proposes innovative ways to cultivate intercultural sensitivity, mutual understanding, and interaction within multicultural societies.

17:05-17:30

73857 | *"My English Seems Not Enough": Moving From Language Deficit Views to Kazakhstani CLIL Teachers' Funds of Knowledge*

Sulushash Kerimkulova, Nazarbayev University, Kazakhstan

Michelle Bedeker, Nazarbayev University, Kazakhstan

In Kazakhstan, the rich diversity of local knowledge seems to be ignored by policymakers who favor discourses of globalization and internationalization that disempower local expertise in favor of dominant forms of Eurocentric thinking. Such discourses can lead to the marginalization of teachers' pedagogical content knowledge (PCK) (Shulman, 1986), which encompasses teachers' philosophical assumptions, beliefs, and values that underlie their teaching practices (Mascolo, 2020). This paper argues for including teachers' funds of knowledge (FoK) and practice-based evidence to foreground their responsive and lived pedagogies despite their limited English proficiency. We used a qualitative approach that included a classroom-based comic, semi-structured interviews, and teachers' reflections to show how Kazakhstani biology teachers' practical, theoretical, and value-laden pedagogical choices exemplify intentionality when they engage through CLIL (Content and Language Integrated Learning) in EMI classrooms. Our findings suggest that Kazakhstani teachers "are competent, they have knowledge, and their life experiences have given them that knowledge" (González, Moll, & Amanti, 2005, p. ix). We conclude that a FoK frame shifted our gaze from measuring teachers against a western-based yardstick allowing us to foreground Kazakhstani teachers' professional identities and practice-based EMI pedagogies as locally and contextually relevant.

17:30-17:55

70564 | *Barthesian Semiologies on Selected Short Stories of Bienvenido Santos*

Jose Macatangay, De La Salle Lipa, Philippines

The study applies Roland Barthes' semiologies in the selected short stories of Bienvenido N. Santos (BNS). For the first level of signification, the short stories' intrinsic elements, such as images, characters, characterization, setting, figures of speech, and dialogues, were used to demystify the signifier signified relationship. For the second level of signification, the connotations were deconstructed to achieve the mythical level of signification that ultimately led to the hidden ideological functions. Behind the Filipino American psychological struggles in the stories based on the characters' exilic experiences is a Filipino with pride in fulfilling his dreams of becoming an American citizen. In realizing a Filipino's American dream is a powerful and autocratic hegemonic group that imposes its norms on the citizens of a country that used to be its colony. While literature aspires to social emancipation, it may also promote the "hegemony of the powerful classes." This study, which applies the Barthesian semiologies, proves that instead of playing the ideal part in decolonization, literature colonizes, like the artifacts of popular culture. Future researchers may apply the Barthesian semiologies in Philippine literature, in other anthologies of Bienvenido Santos, and the 21st-century diaspora literature.

18:10-19:25 | Room 703

# Thursday Onsite Presentation Session 6

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Watcharee Paisart

18:10-18:35

72544 | *EFL Students Perception of the Implementation of Higher Order Thinking Skills (HOTS) in English Language Writing*

Faza Lutfiyana, Universitas Pendidikan Indonesia, Indonesia

Fazri Nur Yusuf, Universitas Pendidikan Indonesia, Indonesia

Higher Order Thinking Skills (HOTS) is inevitably important to develop students' critical and creative thinking skills in 21st century era. HOT skills are the cognitive ability to analyze, evaluate, and create some topic inside or outside the classroom. This case study was conducted to explore the impact of using HOT skills and investigate student's perception towards its use in EFL writing classrooms. This study involved five students in the third grade in junior high school. They were asked to independently write recount texts with similar theme. Students' worksheet and interviews are conducted and then analyzed by using Bloom's taxonomy. The findings eventually show that that stage "analyze" mostly appears in written form and the students felt actively involved in learning activities, developed their writing skills, and experienced learner autonomy and problem-solving abilities. The study recommends that HOT skills have a positive result for EFL students and be explicitly infused in the teaching and learning of writing activities in EFL classrooms.

18:35-19:00

71612 | *Practices and Challenges of Learner Autonomy in English Learning: Voices from High and Low Achievers*

Sri Novianti, Universitas Pendidikan Indonesia, Indonesia

Fazri Nur Yusuf, Universitas Pendidikan Indonesia, Indonesia

Autonomy of English language learners in EFL contexts has long interested scholars to investigate how autonomy is practiced and ways to promote it. However, there seems less research investigating how learner autonomy is practiced among students from different academic competence levels. Therefore, this qualitative study aims to investigate students' practices and challenges of autonomy in learning English. This study involved two high school students (high and low achievers) in an EFL classroom. Both students' English proficiency was categorized based on academic achievement judgment. The data were collected through online questionnaires designed to gauge students' frequency in carrying out activities supporting learner autonomy and semi-structured interviews asked to ascertain those activities and identify challenges students face in doing the practices. The study's findings reveal contrastive practices in terms of learning quality and material access among the high and low achievers. Likewise, different considerable challenges are found. The high achiever perceives limited time of learning as the most affecting constraint whereas another participant lacks learning motivation since he feels no relevance between English and his real world. Interestingly, the willingness of both low and high achievers to practice autonomy in learning is similar; notwithstanding, they expect the teacher to always provide them with related materials to be learned inside and outside the classroom. The study's results suggest teachers fully encourage and facilitate students to engage in activities supporting their autonomy.

19:00-19:25

73919 | *Motivation in English Learning: A Case Study of an ESP Course in a Thai University*

Watcharee Paisart, King Mongkut's University of Technology North Bangkok, Thailand

Running an ESP course which requires students to participate actively in the course, the students' ability to interact with topics a teacher raises in class is important. As a teacher, the researcher had noticed that some students enjoyed the class while some did not. This brought to an investigation to see what caused this phenomenon to happen so as to understand the condition and factors that affect students' motivation in learning English. Then, more appropriate lessons may likely be focused for further courses. The investigation was done by an open-ended questionnaire with 103 participants who studied an ESP course in a Thai university. Three main questions were studied: (1) Do you like learning English? (Why or why not); (2) How much motivation do you have in learning English? (What are factors encouraging you to learn English); and (3) How much confidence do you have in speaking English? (What are problems affecting your confidence in speaking English?) The results showed that 76.70% of the students like to study English; while 18.45% do not, and 4.55% neither like nor dislike. Most students love learning English because they want to go abroad and use English to communicate. For their motivation scale ranking from 0-10, the average is at 7.15 with the reason on the ability to communicate with foreigners at 31.08%. For problems affecting confidence in speaking English, the low-self esteem in speaking English is highly stated at 34.16%. The average of confidence in speaking English is at 4.85 (out of 10).

09:00-10:40 | Room 704

# Thursday Onsite Presentation Session 1

Professional Training, Development & Concerns in Education

Session Chair: Enrico Rosales

09:00-09:25

75928 | *Professional Nursing Education and Concerns of Newly Graduated Nurses' Experiences of Transitioning from Student to Nurse: A Qualitative Inquiry*

Yin Ching Diana Tsang, Caritas Institute of Higher Education, Hong Kong  
Lui Shek Eric Chan, Caritas Institute of Higher Education, Hong Kong  
Pau Le Lisa Low, Caritas Institute of Higher Education, Hong Kong  
Lai Fong Annie Mok, Caritas Institute of Higher Education, Hong Kong  
Yat Cheung Maggie Wong, Caritas Institute of Higher Education, Hong Kong

Background: The provision of professional training and education for nursing students to transition to registered nurses is never easy. The transition period of a newly graduated nurse is the initial 12 months after graduation and is a crucial period of adjustment and settling in. A greater understanding of the professional training and education of nursing students has received and its influence on their transition experiences is needed. Aim: To explore the first-year role transition of newly graduated nurses and reflect on the way professional nurse training had been delivered and educational concerns to be addressed. Method: Convenience sample was used to recruit nine newly graduated nurses to participate in three focus group interviews. Interviews were audio-recorded, transcribed and analyzed using thematic content analysis. Results: Newly graduated nurses were experiencing high stress in (1) Changing identity from student learner to nurse, and (2) Settling into new clinical environments. As part of professional educational development, possessing sound knowledge of some clinical specialties is crucial and should be taught at the school. Issues that could ease the transition and could be emphasized: situation handling and specialty training; learning to maintain a positive mentality and setting self-improvement goals; practising skills to strengthen interpersonal relationships; learning to accept mistakes and integrate knowledge into practice. Conclusion: Results suggest that clinical simulation training may be an effective learning experience to address the educational concerns of students. Further research is warranted to explore the use of clinical simulation training on final-year students to prepare them for professional careers.

09:25-09:50

73950 | *The Impact of Virtual Exchange on Teachers' Professional Isolation*

Xiaoting Yu, Autonomous University of Barcelona, Spain  
Melinda Dooly, Autonomous University of Barcelona, Spain  
Margarida Morgado, Castelo Branco Polytechnic University, Portugal  
Gabriella von Lieres und Wilkau, University of Education Weingarten, Germany  
Ute Massler, University of Education Weingarten, Germany  
Carina Schönberg, University of Education Weingarten, Germany

In an age of increasing complexity, there is a growing sense of teacher isolation, often leading to professional attrition. Teachers' professional isolation seemed exacerbated by the COVID-19 lockdowns. This study aims to establish whether and how participation in VALIANT Virtual Exchanges (VE) can help overcome teachers' sense of isolation. VALIANT, an EU-funded research project, aims to identify participation in VE programmes that contribute to overcoming teachers' sense of isolation and low motivation often experienced by teachers in rural areas and in isolated contexts. It also supports the development of teachers' ability to operate effectively in online international networks of professional collaboration. Data was gathered from teacher participants' responses related to the topic of isolation in pre, mid and post-surveys completed in three 6-week online exchanges rounds. A coding framework was created based on the literature review and inductive analysis of sample data from a pilot. Three categories of isolation were used for deductive coding in NVivo: physical, administrative, and emotional isolation. Key findings indicate that taking part in the VE did reduce their sense of isolation. Teachers found that sharing similar concerns, issues and feelings, and raising the awareness of the importance of their network of colleagues for their professional well-being mitigated feelings of isolation. The VEs promote positive collegial interactions, benefiting teachers' professional growth and alleviating emotional isolation. These and other key findings will be presented.

09:50-10:15

73568 | *Meeting the Teachers' Psychological Needs: Perspectives From Basic and Higher Education Institutions*

Jemma Gonzales, National University, Philippines

In the Philippines, most of the time teachers are overworked and mental health suffers; yet there is still a problem when it comes to the provision for school-based mental health services because of lack of funding especially in the public school. This study employs exploratory multiple case study approach which focuses on the delivery of psychological needs of teachers using the data from private institutions across three education levels (elementary, highschool and college) in Manila. Using the Ryff's multiple facets of Psychological well-being, and three universal needs from Self-determination theory, this research aims to examine teachers' understanding of psychological health and well-being, as well as to determine the programs and projects implemented by educational institutions to promote the psychological well-being of their teachers. By analyzing the responses of school heads or administrators, the researcher will ascertain how education institutions assess and prioritize the psychological needs of teachers. Additionally, this study will explore the various issues and challenges encountered in meeting these psychological needs.

10:15-10:40

73825 | *Relationship of Research Productivity, Professional Trainings, & Organizational Affiliation to Teaching Performance in Higher Education*

Enrico Rosales, La Consolacion University Philippines, Philippines  
Gerardo Baez, La Consolacion University Philippines, Philippines  
Ron Jewel Avendaño, La Consolacion University Philippines, Philippines  
Benjamin Dillena Jr, La Consolacion University Philippines, Philippines

The present study investigates the factors influencing teaching performance among graduate professors, including professional affiliations, research productivity, and professional trainings. Information was gathered from professors in the graduate level, including aspects of teaching performance, trainings attended, research productivity, and organizational affiliations. Data was analyzed through an Analysis of Variance (ANOVA) test. The study involved a sample of 60 professors from the Graduate Studies department who taught across various disciplines. The inclusion criteria for selecting respondents were limited to those holding a doctorate degree. This criterion ensured that the sample consisted of highly qualified and experienced faculty members within the department. As such, teaching performance takes into account student evaluations within the past three semesters. Moreover, research productivity was measured at the number of publications for the past five years. Meanwhile, organizational affiliations take into account memberships relevant to the fields at which they are teaching, where they are in current active standing. The statistical results from the ANOVA test reveal that while the number of trainings attended does not significantly impact teaching performance, both organizational affiliations and research productivity have a significant effect. In light of these findings, it is recommended to create more opportunities for faculty involvement in professional organizations and enhance research infrastructure. Emphasizing the quality and applicability of training programs, rather than quantity alone, may also be beneficial. These actions aim to foster faculty development, improve teaching performance, and enhance the quality of education at the graduate level.

10:55-12:35 | Room 704

# Thursday Onsite Presentation Session 2

Professional Training, Development & Concerns in Education

Session Chair: Neal Luo

10:55-11:20

74302 | *Using Team-Based Learning for Post-graduate Training: Challenges and Solutions*

Luan Au, University of Medicine and Pharmacy at Hochiminh City, Vietnam

My Do, University of Medicine and Pharmacy at Hochiminh City, Vietnam

Hien Nguyen, University of Medicine and Pharmacy at Hochiminh City, Vietnam

Introduction: Available evidence demonstrates that Team-Based Learning (TBL) enhances teacher-learner interactions, solves cognitive gaps, connects concepts, and builds critical thinking. Nowadays, TBL become a popular approach in undergraduate training (UGT). Surprisingly, only a few institutions implemented TBL into their post-graduate training (PGT) programs. UGT and PGT differ in their educational ecosystem, learning goals, and learner characteristics. Attempting to use TBL in PGT (TBL-PGT) requires adaptations to these differences. There are few conducted studies on TBL-PGT. Most discuss the possibility of using TBL in specific courses and do not discuss technical issues. We also experience challenges during our experiential TBL-PGT course. This paper aims to clarify TBL-PGT characteristics, identify potential challenges and discuss suitable solutions. Methods: We search papers on TBL-PGT, identify technical issues and discuss potential solutions. Results: To date, no systematic use of TBL in any post-graduate programs. All TBL-PGT attempts were experiential. The authors agreed that TBL could be part of the PGT program and that implementing TBL-PGT requires suitable adaptations. Experiences from experiential TBL-PGT affirm the crucial role of adapting course design to the particular PGT educational ecosystem, the complexity of knowledge, and the ability to link new concepts to real-life activities. We identify factors that might influence the TBL-PGT program outcomes, which include involving experts, enhancing learner accountability, building teams, determining educational goals, configuring assessments, preparing learning material, formulating authentic applications, training facilitators, and organizing in-class activities. Conclusions: TBL is suitable for PGT. It promotes certain advantages. However, curriculum developers should consider adaptations while implementing TBL-PGT.

11:20-11:45

75023 | *Exploring EFL Teachers' Perspectives on TPACK Development in Post-COVID Era China: The Role of In-Service Teacher Education Programs*

Ruiqing Zhao, University College London, United Kingdom

Enhancing English as a Foreign Language (EFL) proficiency in academic and career domains has become increasingly vital in the context of advancing globalization. To ensure the effectiveness of EFL teachers in this pursuit, the Technological Pedagogical and Content Knowledge (TPACK) framework serves as a pivotal tool in assessing their capabilities. EFL teachers can acquire TPACK through in-service teacher education programs, self-learning avenues, and other means. The outbreak of the COVID-19 pandemic mandated a shift in the application of technologies into teaching, necessitating adaptations in traditional teaching methodologies. Against this backdrop, this study delves into the perspectives of EFL teachers in post-COVID China, concerning their TPACK development. Specifically, the study focuses on the efficacy of in-service teacher education programs and self-learning approaches. Employing a mixed-methods approach, the study conducted an internet-based questionnaire, receiving 152 valid responses, and held semi-structured interviews with 7 EFL teachers from public secondary schools in Guangdong Province, China. Findings of the study emphasize the paramount importance that EFL teachers place on continuous TPACK improvement to elevate their teaching proficiency. They observed the direct impact of the COVID-19 lockdown period on their TPACK application. While in-service teacher education programs yield some benefits, there remains significant scope for enhancing their effectiveness in facilitating TPACK development among EFL teachers.

11:45-12:10

75570 | *Exploring Classroom-Centric Research: Significant Themes and Viable Approaches as Practiced by K-12 Teachers*

Neal Luo, Emporia State University, United States

In a more complex and dynamic view of teaching profession, teachers need to exhibit research-informed practices by utilizing and conducting classroom-centric research (Taber, 2013). This holds particular significance with the increasing emphasis in schools on continuous improvement, data-driven decision making, and evidence-based practice. This study utilized the documents of classroom research proposed or implemented by 103 K-12 teachers from a midwestern state of the United States in summer 2023 to explore the significant themes and viable approaches of classroom-centric research. Employing a comprehensive thematic analysis, the data underwent coding, analysis, and organization to discern the prevalent themes. The analysis revealed nine prominent significant classroom research domains and their themes: Academic Performance Enhancement, Teaching Strategies and Engagement, Social-Emotional Learning (SEL), Teacher Professional Development and Retention, Student Well-Being and Inclusion, Assessment and Learning Approaches, Creative Thinking and Mindset, Educational Technology Integration, and Cultural Diversity and Inclusivity. Teachers predominantly suggested pragmatic research strategies, encompassing quantitative designs like experiments and comparative research, as well as qualitative approaches such as case study, phenomenology, and grounded theory. However, quantitative correlational research and qualitative ethnography were notably less prevalent in their mixed methods designs. This study contributes to a comprehensive understanding of diverse classroom-centric research domains, themes, and practical methodologies, providing evidence-based insights for teachers and teacher educators. It sheds light on crucial practical research subjects and offers actionable techniques for teachers and enable teacher educators to adeptly train teachers to embody a high level of professionalism.

12:10-12:35

75558 | *A Case Study on the Training Program To Strengthen AI Capabilities Pre-Service Teachers: Forcing on Pre-Service Teachers in Busan*

Yuri Kim, Pusan National University, South Korea

Suhong Park, Pusan National University, South Korea

This study aims to analyze the case of training programs to strengthen AI digital capabilities of pre-service teachers. To this end, a training program for pre-service teachers was designed, developed, and implemented to strengthen AI and digital capabilities. This educational program was attended by 33 pre-service teachers attending a teacher training institution in Busan, and six educational program contents for students were derived as a result of the training program. In addition, pre and post AI digital competency evaluation diagnostic questions were conducted for participants in this training program to identify the indicators that changed before and after participation in the training. This study allowed pre-service teachers to participate in education centered on activities to strengthen AI and digital capabilities, thereby acquiring learning experiences from a learner's point of view. In addition, it is significant that incumbent teachers participated as instructors to educate based on field examples and conduct specific consulting on participants' results to conduct generative training that achieved learning through experience and completed field applicable results.

12:50-14:05 | Room 704

# Thursday Onsite Presentation Session 3

Professional Training, Development & Concerns in Education

Session Chair: Rose Amnah Abd Rauf

12:50-13:15

73824 | *Enhancing Music Education in Early Childhood Teacher Education: A Quasi-experimental Study on Pre-service Teachers' Musical Competence and Teaching Confidence*

Siu-hang Kong, The Education University of Hong Kong, Hong Kong

Music education is often regarded as an elite discipline in Chinese society, and pre-service teachers in early childhood education may lack musical knowledge and confidence in teaching music due to interdisciplinary teacher training. This study aims to explore the essential components of a quality responsive teacher education course in music for pre-service teachers in Hong Kong and evaluate the impact of six-hour training workshops on their self-perceived musical competence and music teaching confidence. The study employs a quasi-experimental research design and consists of six-hour training workshops in music to enhance pre-service teachers' musicianship and competence in conducting music appreciation, performance, and creative activities. This study answers two research questions based on the quantitative and qualitative data: (1) How will the training workshops impact pre-service teachers' self-perceived musical competence and music teaching confidence? (2) How will the musical competence enhance their music teaching confidence? The study employs a quasi-experimental research design and finds that the workshops significantly improve pre-service teachers' confidence in leading music activities and their perceived importance of children's music education. The study underscores the need for music training in early childhood teacher education and may offer insights into designing responsive music professional development courses for early childhood teachers globally.

13:15-13:40

75087 | *Performing with Teachers: Voices from an Embodied Narrative*

Xiangyan Liu, Hunan Normal University, China

Shuqin Li, Hunan Normal University, China

Sisi Yang, Hunan Normal University, China

This paper presents a performance text resulting from a collaborative inquiry conducted between university researchers and teachers from a public primary school in China. Embodied narrative is viewed as a theory, method, practice, event and collective action for the collaborative inquiry. Drawing from narrative inquiry by D. Jean Clandinin, Forum Theater by Augusto Boal, performance studies with emphasis on ethnography as dialogical performance suggested by Dwight Conquergood, and Chinese philosophical thoughts on equalization of things by Zhuangzi, the theoretical framework is multi-dimensional and robust. The performance text explores the intricate positionalities of teachers and teacher educators using carefully selected vignettes from the embodied narrative process. Through this collaborative approach, participants negotiate diverse identities and character roles, fostering reflexivity, and dissolving boundaries between researchers, teachers, and performers. Consequently, the meaning of "teacher professional development" is epistemologically redefined. Embodied narrative, as a collaborative inquiry, challenges the prevailing deficit model in teacher education, debunking assumptions that teachers lack research competencies. It effectively critiques the textualism in educational research and highlights the importance of "culture as performance" and "practice as research." Within the pedagogical and political realm of embodied narrative, teachers and teacher educators embrace a holistic approach, bridging the theory-practice gap, transcending individual-public boundaries, and proactively taking action. This paper's insights will contribute to advancing teacher professional development and promoting a transformative paradigm in educational research. By emphasizing the embodied narrative, this paper advocates for embracing experiential and performative aspects of learning, ultimately fostering a more inclusive, collaborative, and empowering teacher education practice.

13:40-14:05

74524 | *Development of STEM Teachers' Conception on STEM Education*

Rose Amnah Abd Rauf, Universiti Malaya, Malaysia

The STEM reform movement in Malaysia comprise of three main goals: to increase the number of students pursuing advanced degrees and careers in STEM fields, expand and broaden participation in the STEM workforce and make STEM literacy for all students a reality. Before the STEM reform, science teachers still believed that STEM Education is the same as teaching science discipline as a subject matter. Due to this, science teachers uses the same pedagogy as before and the outcome is the same; participation to pursue STEM degrees and careers is still declining and insufficient, resulting in insufficient STEM workforce for the future and most importantly the ability to produce critical thinkers, innovative and inventive students for the next generation. The conception of STEM teachers on STEM Education need to be reengineered. Thus, this paper will share the framework of a three year program for 32 primary science teachers in one state in Malaysia from the years 2020-2022. This project was carried out in this particular state due to the willingness of the state education department to support the project which aims to increase participation in STEM careers and graduates as well as to train their teachers to implement STEM programs in schools. The reform has shown positive impact which are an increase in enrolment in science stream classes, science subject achievement, and the STEM programs that were carried out by these teachers. Data was collected through focus group discussions, interviews, and document analysis.

14:50-16:35 | Room 704

# Thursday Onsite Presentation Session 4

Professional Training, Development & Concerns in Education

Session Chair: Waralee Chimthongdee

14:20-14:45

76112 | *The Online Training to Create an Online Society That Connects Tourism for Employment and Preparation for Future Work*  
Surapon Boonlue, King Mongkut's University of Technology Thonburi, Thailand

The tourist industry is one of the most significant industries in Thailand's economy, generating more foreign currency than other exports. Consider that the tourist industry contributes to the growth of the nation; provides jobs; distributes revenue; circulates currency in the economy; and enhances the country's image. This study has been deemed the nation's soft power. This initiative has been financed by the government. Developing the nation's personnel skills (reskilling, upskilling, and new skills) in order to secure employment and prepare for future employment. After the 2019 coronavirus epidemic. This research aims to: 1. construct an online training system to convey knowledge and the production process of tourist media to communities and people during the coronavirus disease 2019 (COVID-19) epidemic; and 2. examine people's access to online training systems. Examine the performance of the online trainees. The findings demonstrated that: 1. the developed online training system is of high quality. There are both media and self-evaluations. It may be used as a learning center and for self-development by trainees. During the COVID-19 epidemic, participants were given three months of online training. 1348 individuals have participated in the program, and 267 individuals who have passed the course may submit their work to get certificates. The outcomes of the online trainees who have been taught during the duration of the project are capable of producing video media. The objective is to expose the community to its own attractions at the highest level possible.

14:45-15:10

76080 | *Online Teacher Professional Learning – Perceptions, Readiness, Preferences*

Shu-Shing Lee, Nanyang Technological University, Singapore

Lee Yong Tay, Nanyang Technological University, Singapore

Kalaivani Ramachandran, Nanyang Technological University, Singapore

Andrew Pereira, Nanyang Technological University, Singapore

Caroline Ho, Academy of Singapore Teachers, Singapore

Teacher professional learning is key to quality teachers' growth. With an increased shift towards online professional learning (OPL), since the pandemic, this study aims at understanding teachers' perceptions of OPL in terms of their readiness, self-efficacy, attitudes towards OPL, effectiveness of OPL, challenges faced and preferences for OPL. An online survey was used to elicit the responses of 1622 teachers across 37 schools in Singapore. Findings indicated that teachers had a positive attitude towards OPL and were willing to engage in OPL as they found it to be a convenient and an easy way of learning and did not find online synchronous engagement challenging. Teachers felt that their readiness and self-efficacy for OPL to be high. They also perceived OPL to be useful. However, they felt that the availability of time to complete assignments, opportunities, and support to transfer learning to practice were limited. They also felt that online interaction is not key to making OPL attractive and/or effective. Findings also indicated teachers had preferences in terms of mode, content and structure of OPL. For instance, teachers preferred a blend of online and in-person modes – content-based learning for online mode and experiential learning for in-person mode. Teachers would like to have more engaging content (e.g., more hands-on sessions, interactive quiz, discussions). They also preferred to hear other teachers' sharing of experiences of how they applied learning in classrooms, see expert teachers demonstrate instructional strategies in an actual classroom, and attend online professional learning with colleagues from own school.

15:10-15:35

75952 | *Changes in Secondary Teachers' Attitudes as an Impact of Gender and Inclusive Pedagogies: A Cross-Country Analysis Between Bangladesh and Bhutan*

Sonam Wangmo, Samtse College of Education, Bhutan

Saiful Malak, University of Dhaka, Bangladesh

Tashi Tashi, Samtse College of Education, Bhutan

Kuenzang Gyeltshen, Samtse College of Education, Bhutan

Ramesh Chhetri, Samtse College of Education, Bhutan

Kezang Wangmo, Samtse College of Education, Bhutan

Over the past decade, borrowing concepts of inclusive pedagogy for changing teachers' attitudes towards diverse learners has widely been practiced across the world. However, borrowed inclusive pedagogies have been criticised consistently by a body of research due to various limitations including lack of strategies or effort for contextualization. Hence, considerations of country-specific dynamics, and design and experimentations of various inclusive pedagogies have been critical in various nations. This study is part of a large-scale investigation attempting to measure the impact of a co-designed teacher professional development package, 'Gender and Inclusive Pedagogy (GIP)' on students' participation and learning achievement at secondary level in Bangladesh, Nepal, Bhutan, Vietnam and Timor-Leste. A four tiered GIP intervention has been implemented in 70 secondary schools for one academic year across the aforesaid five countries. An experimental design comprising both experimental and control groups was utilized to define the changes occurred in teachers core variables-e.g. attitudes, efficacy beliefs, behavioural intention and practice. This particular paper focuses on the changes that occurred in teachers' attitudes after completion of the GIP intervention in 20 schools in Bangladesh and 10 schools in Bhutan. Data were collected using Teacher Attitudes towards Inclusion Scale (TAIS) developed by Sharma et al. (2020) during baseline and endline phases. Both descriptive and inferential statistics have been utilized to analyse the data. Findings of the study analysing both baseline and endline data revealed that teachers' attitudes have improved significantly because of the GIP intervention in both countries.

15:35-16:00

76011 | *A Proposed Framework of an e-Coaching Integrating Enneagram Personality to Enhance In-Service Teachers' Instructional Ability*

Waralee Chimthongdee, Chulalongkorn University, Thailand

This study aimed to develop a comprehensive framework for an Enneagram-based e-coaching aimed at improving instructional abilities of in-service teachers. The research process involved reviewing related literature on e-coaching, Enneagram personality theory, and in-service teachers' instructional abilities to formulate the components of the Enneagram e-coaching framework. Seven experts in the fields of educational coaching and educational technology were invited to evaluate the initial framework, providing robust feedback that consequently refined the model. As a result, the Enneagram e-coaching framework for in-service teachers' instructional ability development comprised four components: 1) teachers and coaches, 2) Enneagram coaching, 3) instructional ability development goals, and 4) Enneagram e-coaching system with GROWER model, consisting of six coaching steps: 1) goal setting for teachers' instructional ability development, 2) reality reflection, 3) option selection, 4) execution of coaching plans, 5) willingness for success, and 6) reflection and assessment.

16:15-17:55 | Room 704

# Thursday Onsite Presentation Session 5

Counselling, Guidance & Adjustment in Education

Session Chair: Arden Jang

16:15-16:40

74193 | *Attachment, Resilience, and Psychological Well-Being: Testing Mediation Effect of Resilience Between College Students with and Without Disabilities*

Yi-Hsuan Liu, National Taiwan Normal University, Taiwan

**Problem Statement:** People with disabilities are expected to have poorer mental health. This study seeks to investigate of disability on the attachment, resilience, and psychological well-being of people with disabilities. **Method:** 359 college students (192 without disabilities and 167 with disabilities) were recruited and filled in a questionnaire containing 3 measuring scales. An independent sample t test, ANOVA, and mediated effect analysis were performed to determine the effect of resilience on their psychological well-being. **Results:** 1. Female students with disabilities exhibited significantly higher attachment anxiety towards their mothers, while there was no difference among students without disabilities. However, no differences were observed in other variables between students with and without disabilities. 2. Students with mental disabilities showed higher attachment anxiety towards parents, compared to students with sensory disabilities. They also had lower resilience and psychological well-being compared to students with other types of disabilities. 3. Attachment anxiety and attachment avoidance were negatively correlated with resilience, and resilience was moderately positively correlated with psychological well-being. 4. The attachment anxiety towards parents in both groups of students could be influenced by resilience, which in turn affected psychological well-being. Contrary to our expectation, the total effect of attachment avoidance on psychological well-being was not significant. **Conclusion:** Based on results, the mental health of people with disabilities may not differ significantly from the general population, and the mechanisms of resilience are similar. However, it is worth noting that individuals with invisible disabilities tend to have poorer mental health. Thus, more counseling resources are necessary.

16:40-17:05

75051 | *Conducting Workplace-Based Assessment in Undergraduate Training: What We Have Learned From Failures?*

Luan Au, University of Medicine and Pharmacy at Hochiminh City, Vietnam

My Do, University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam

Hien Nguyen, University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam

In outcome-based education, workplace-based assessment (WPBA) should accurately provide stakeholders with evidence of learner competencies. In undergraduate training (UGT), mini-clinical evaluation exercises (mini-CEX) and direct observation of procedural skills (DOPS) accurately reflect learner performance. The portfolio is far from an independent WPBA tool. This paper summarizes changes in the WPBA strategy for UGT during UMP curriculum renovation and discusses solutions that might improve WPBA validity. In the 2010s, the UMP began to build an accurate and suitable WPBA strategy. The first edition included four specific mini-CEXs and two specific DOPS. It enhanced learner performance but increased educator workload, therefore provoking negative educators' reactions. The second edition had one multipurpose mini-CEX. Its complexity negatively impacted learner orientation and educator acceptance. Digitalization characterized the third edition and aimed to improve user acceptance and database management. The educator workload was the main obstacle to running this edition. We removed DOPS from the two last WPBA editions due to license requirements. To date, we still consider that portfolio is for formative purposes. From the learned failures, we imagine solutions can improve our WPBA validity. Mini-CEX is still the primary tool, and portfolio is a secondary one. A series of specific mini-CEX seems better than one 'all-in-one'; mini-CEX should use detailed rubrics, which enhance the correlation score-performance; flexible agenda gives learners autonomy; preparing educators to conduct mini-CEX is mandatory. Concerning the portfolio, we prioritize crafting a comprehensive user guide and removing unnecessary fields from the current portfolio. Digital design and management allow ubiquitous use.

17:05-17:30

75606 | *No Attachment, No Hindrance: A Case Study of Zen Teachers' Support for Students Facing Mental Distress During Retreats*

Hugh Schuckman, University of Utah, United States

Arden Jang, University of Utah, United States

Psychological distress is an oft-reported challenge for Buddhist students during extended meditation retreats. Academic and popular literature often label this phenomenon "the dark night of the soul," periods of practice in which students report not the expected feelings of elation associated with spiritual transformation, but instead feelings of mental distress and spiritual crises. This case study research on the Kwan Um School of Zen (KUSZ) focuses on better understanding the support meditation teachers provide to students confronting spiritual crises, specifically before, during, and after bi-annual 3-month periods of intensive practice (Korean: *kyol che*). This study aims to showcase the KUSZ teachers' understanding and support for students through semi-structured interviews with meditation teachers. Bolstered by archival research on the school's literature and broader research on the subject, these interviews highlight the school's Zen Buddhist framework for understanding a spiritual crisis as well as underscore protocols to support students during these experiences. As meditation and long-term retreats become increasingly subject to scrutiny, a modern Buddhist school's perspective can both add to the growing literature on the subject and offer valuable perspectives to practitioners from any Buddhist schools facing similar challenges.

17:30-17:55

75777 | *Mentoring to Enhance Student Teachers' Self-Efficacy for E-Portfolio Development During Teaching Practice*

Ratokelo Willie Thabane, Central University of Technology, South Africa

Teaching Practice is a critical phase of teacher education that provides opportunities for student teachers to reflect on the development of their teaching philosophies and put them into action. Student teachers' self-efficacy refers to their beliefs in their ability to effectively handle the tasks, obligations, and challenges related to their professional activity. E-portfolios as learning tools can be utilized to facilitate the development of skills for self-directed learning. Good quality mentoring in schools contributes to the development of critical professional skills of student teachers and ensures the best quality learning experiences for pupils. This paper is arranged as an ideas paper that seeks to explore how mentoring may enhance self-efficacy for e-portfolio development during teaching practice. A qualitative research design was adopted in gathering information used for this study. A literature review process was used as a data collection tool and this involved activities such as identifying, recording, understanding, meaning-making, and transmitting information pertinent to the enhancement of student teachers self-efficacy for e-portfolio development during teaching practice through mentoring. Findings revealed that good quality mentoring may enhance the student teachers' self-efficacy for e-portfolio development and that e-portfolios are practical tools for self-directed, reflective and collaborative professional learning. Further findings show that formal mentoring programs are essential to meet student teachers professional learning needs. These findings will encourage mentor teachers to optimally assist student teachers to develop e-portfolios for their professional learning.

18:10-19:25 | Room 704

# Thursday Onsite Presentation Session 6

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Marlan Negizbayeva

18:10-18:35

76035 | *Building Cultural Intelligence Through Experiential Learning*

Chie Misumi, Amsterdam University of Applied Science, Netherlands

Catherine Wu, Nanyang Technological University, Singapore

Hui-Teng Hoo, Nanyang Technological University, Singapore

Brenda Choo, Nanyang Technological University, Singapore

COIL (collaborative online international learning) has become one of the most-applied experiential learning tools since the outbreak of COVID. By stimulating international/intercultural interactions amongst students from different cultural backgrounds who are located in different parts of the world it develops Cultural Intelligence which enables individuals to work effectively in multicultural environments. Amsterdam School of International Business from Amsterdam University of Applied Sciences has implemented COIL as a mandatory component throughout their curriculum which contains three stages of Basic, Advanced, and Professional. We are expected to work more remotely and globally in the future so the implementation of COIL in the curriculum of higher education becomes crucial. This session will explain you about how COIL relates to developing one's Cultural Intelligence. While introducing the built up of their curriculum the presenter will share her experiences in setting up and carrying out 27 COIL projects for the last 5 academic years. At the end of the presentation participants are able to get more practical insights into how to design and execute new and/or existing COIL projects further within their own institutions.

18:35-19:00

75688 | *Needs and Barriers for Integration of Education and Maternal Health Among Teenagers in Refugee Settlements: Narratives of Teenage Mothers in Palabek, Rhino Camp and Kyangwali Refugee Settlements*

Hilda Namakula-Masaba, Windle International Uganda, Uganda

Sam Muhumza, Windle International Uganda, Uganda

Andrew Omara, Windle International Uganda, Uganda

Background: Due to COVID 19, schools in Uganda were closed for over 24 months an aspect that came with numerous untamed challenges including a surge of teenage pregnancies. Nationally, teenage pregnancies multiplied up to 30% with rural districts highlighted as the most vulnerable. Refugee communities were not an exception. Windle International Uganda's (WIU) qualitative study dives into the aspects of their lived experiences economically, physically, emotionally, socially, and other cross cutting issues around early motherhood. Methods: WIU adopts the Adaptive Epidemic Response (AER) framework as a lens to guide the study activities. We reached 134 participants using Key Informant Interviews (24 with policy makers, school administration and local councils), In-depth Interviews (108 with teenage mothers) and Community Discussions (2 parents in the refugee settlements). Preliminary findings: Barriers to meeting their needs include lack of skills in income generation and food preparation due to school drop outs, community harsh treatment, pregnancy and childcare costs, lack of academic qualifications, lack of adequate shelter and land, insufficient access to medicines, tailored health care and appropriate communications crippling their opportunities and intensifying their vulnerabilities besides being refugees in a global pandemic. Conclusion: Adolescent-mother-and-child-friendly environments are needed at local levels while continuing to reduce broader socio-cultural and economic barriers to education and health equity. Findings may help direct future interventions for improved adolescent maternal/child nutrition, education, and health among teenage mothers in refugee and host communities in Uganda. Overtime, these will inform WIU and partners' programming.

19:00-19:25

73515 | *The Topic of Migration and Tolerance Among the Younger Generation: On the Example of the Students of Al-Farabi KazNU Faculty of Journalism*

Marlan Negizbayeva, Al-Farabi KazNU, Kazakhstan

The necessity for scrutinized research on issues related to migration and tolerance is determined by the presence of paradigms and negative stereotypes in society. Certain problems arise from the fact that the migration issue is over-politicized. Some politicians and journalists see this situation as a cause for the pressurization of the tense situation. A research Club for students operates at the faculty of journalism, the aim of which is to shape effective communication and science-based problem-solving skills among students. Within the Club, students identify hostile language and hate speech in the journalistic texts, put them up for discussion, and propose their examples of texts. Among members of the Club, besides local students, are students from Uzbekistan, Tajikistan, Turkmenistan, Afghanistan, and China. The Club fosters the establishment of moral values, tolerance, and guidelines among young people. A survey was conducted among the members of the Club to check the Club's work efficiency and determine the tendencies in the development of interethnic and cross-cultural dialogue. Creative works of students and texts of their articles have also been studied for civil solidarity and the nature of dialogue and compromise. Experience of the Club can serve as a good example of ensuring an objective public perception of migration issues: understanding the global nature of the topic, assessing objectively the migration processes, and explaining laws and rules of labor migration.

09:00-10:40 | Room 705

# Thursday Onsite Presentation Session 1

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Mark Rey Santos

09:00-09:25

73282 | *The Effect of Web-Based Peer Assessment Systems in Higher Education*

Nyoman Sugihartini, Universitas Negeri Malang, Indonesia

Waras Kamdi, Universitas Negeri Malang, Indonesia

Hakkun Elmunyah, Universitas Negeri Malang, Indonesia

Didik Nurhadi, Universitas Negeri Malang, Indonesia

This study aimed to implement web-based peer assessment in microteaching courses using an experimental class and a control class. Based on statistical analysis, there is a significant influence in the application of web-based peer assessment in microteaching courses. The response instrument used in this study has fulfilled the validity and reliability tests with a Cronbach alpha co-efficient value of 0.9. The results of the analysis of 29 students showed that as many as 12 students gave very positive responses. As many as 15 students gave positive responses. As many as 2 students gave responses with quite positive categories. Meanwhile, there were no students who responded with less positive and very less positive categories. If the percentage conversion is carried out, then as much as 41% is in the very positive category, 52% is in the positive category, 7% is in the moderately positive category, and there are no students who have responses in the less positive and very less positive categories. This indicates that digital peer assessment is very well used in improving student teaching skills which is the main goal in microteaching courses.

09:25-09:50

76038 | *Designing Teaching Materials in the On-Demand Classroom in the Context of Thailand Lesson Study Incorporated with Open Approach*

Kamonchanok Japa, Khonkaen University, Thailand

Narumon Changsri, Khonkaen University, Thailand

Maitree Inprasitha, Khonkaen University, Thailand

Khem KhenKhok, Khonkaen University, Thailand

Ua-Jit Pattanajak, Khonkaen University, Thailand

This study aimed to explore how to design teaching materials in the On-Demand Classroom (ODC). A qualitative research method was employed. A total of 31 lower elementary students were the target group. Entirely 12 participants in a Lesson Study team, including a mathematics teacher, researchers, mathematics and art educators, were collaboratively designing, observing research lessons, and reflecting on teaching practice. There were ODC videos, lesson plans, and video and audio recordings as the research instrument. Data was collected from students' written works and worksheets, video recordings in the virtual live classroom, observational recordings, and reflective meetings among the LS team members. The results revealed that during the collaboratively designing research lesson, the LS team fabricated the teaching materials that were implemented in the ODC consisting of learning kits – box kits, an on-demand video containing an introduction of the materials and the direction to create the box, worksheets, and guidelines for submitting the works. Besides, the Problem Situation (PS) in the ODC video was meticulously crafted in alignment with 1) Context, which overlaps with the student's experiences and is essential to coping with and engaging PS, in this study where the box exists daily. And 2) Condition, which is the various forms of instruction that play a critical role in supporting students to connect with the PS to cultivate self-learning, students must create a box and unravel or create it themselves.

09:50-10:15

76097 | *A Framework for the Use of Generative AI for Equity in Community-Based Education*

Allya Paramita Koesoema, Institut Teknologi Bandung, Indonesia

Yoke Saadia Swito, IEEE SIGHT Indonesia, Indonesia

Rapid digital transformation brought by Industry 4.0 and the COVID-19 pandemic underlines the importance of upskilling and lifelong learning. The application of Information and Communication Technologies such as Massive Open Online Courses (MOOCs) and other online training programs have contributed to filling the gap in large scale upskilling and reskilling that is still ill-served by the traditional higher education system. However, most of these learning solutions are presented in generic, standardized format, and are often not well suited to specific needs, especially for more marginalized groups who need them most. New technologies such as generative Artificial Intelligence (AI) have the potential to alleviate these challenges by providing automatic mass personalization of learning, but without appropriate planning may decrease equity due to lack of technology infrastructure accessibility, data and algorithmic bias, as well as other issues. In this paper, we develop a framework for viability assessment, design, implementation, and evaluation of customized generative AI-Based systems to improve equity in community-based learning. The framework emphasizes collaborative design and community-based sustainability of application over time. We use the design of a capacity improvement program for female community health volunteers in Indonesia to illustrate the potential implementation of this framework. We contribute to the literature on technology implementation in education, focusing on fostering personalized learning environment and increasing equity in education.

10:15-10:40

73840 | *The Effect of Students' Use of AI in Research: Towards Policy Recommendations on the Responsible Use of AI in Schools*

Mark Rey Santos, La Consolacion University Philippines, Philippines

Mariefe Cruz, La Consolacion University Philippines, Philippines

This study investigated the effect of students' use of AI in research through the lens of Practical Research teachers. In the Senior High School curriculum, they have PR1 (Qualitative Research) and PR2 (Quantitative Research), where students are expected to conduct and write research which they present and defend before a panel for feedback and corrections to improve the overall quality of the paper and make it more relevant and responsive. Through an interview, the participants shared how the topics of plagiarism and academic honesty are taught in class. They also shared how the responsible use of AI, most especially in research, is being emphasized. The pros and cons of students' use of AI in their subject and the challenges that they face with the emergence of AI, specifically in research, were also identified. It was found that the most commonly used AI by students are those that help them paraphrase ideas that they want to cite in their papers. Writing ideas in their own words at times leads students to have a totally different context from the original idea that they want to use. Although no student admitted that they used AI to write their paper, the PR teachers were very honest in saying that they find it very difficult to verify whether the submissions that they are getting are written by AI or not. In response to the findings, policy recommendations were offered to serve as a guide or basis for the responsible use of AI in schools.

10:55-12:35 | Room 705

# Thursday Onsite Presentation Session 2

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Suhaizal Hashim

10:55-11:20

71017 | *Establish a Virtual Mathematics Classroom Using OneNote Class Notebook*

Guat Poh Betsy Lee, University of Nottingham Malaysia, Malaysia

Muthoosamy Kasturi, University of Nottingham, Malaysia

Matthews Reginamary, University of Nottingham, Malaysia

Mohd Zainal Siti Norahimah, University of Nottingham, Malaysia

The purpose of this study is to establish a virtual classroom environment using OneNote Class Notebook to empower students' learning in mathematics. With the digital interface, teaching and learning were delivered using a blend of synchronous and asynchronous methods. Some of the learning took place in live-stream lectures and other learning was conducted using personalized digital workspace containing weekly exercises and individualized practices. Among the 75 first year mechanical engineering students, 66 students have reported the impact of OneNote Class Notebook to their learning experience through an online survey. Majority of the students perceived that the notebook has provided them an overwhelming experience where they could connect, engage, and learn mathematics in a single platform with multimode of activities. When interviewing three students and listening to their experience and feelings about OneNote Class Notebook, they described their involvement in OneNote as a positive and interesting adventure, in particular the organization power and accessibility support of OneNote where they could freely organize, switch devices, and access the contents at any time and place. In a way, OneNote Class Notebook provides the practical mechanism to facilitate the transition from a physical classroom to a digital learning platform.

11:20-11:45

71910 | *Development of Interaction Simulation Video for Enhancing Digital Empathy Skills*

Sirikanya Maneenil, Sukhothai Thammathirat Open University, Thailand

Pattaraporn Jamsai, Kasetsart University, Thailand

Sueb Wong Chuensombat, Sukhothai Thammathirat Open University, Thailand

This study applies research and development design aimed creates an interactive simulation video that enhances digital empathy skills. There are two groups of participants. First, six experts in educational technology and digital empathy content were purposively selected. Second, 48 high school students were multi-stage sampling. The research instruments were (1) the evaluation form to check the quality of the interactive simulation video and (2) the digital empathy skill test to measure students of knowledge, practical, and attitudes. The data were analyzed using a mean, standard deviation, and percentage. There are three episodes of interactive simulation video. Episode 1, "I'm not afraid true...I'm really afraid it is not," is about spreading accurate information. Episode 2, "My Areas vs. Your Areas," is about respect for rights and emotional control. Episode 3, "Fun Post...Miserable," is about posting information creatively and politely. Each episode consists of three types of interactions; overlay elements, embedded questions, and hotspots. Based on the expert's evaluation, all episodes of interactive simulation videos are quality at the highest level in all aspects (content, video media, and interaction). Episode 1 had an average of quality 4.66 (S.D. = 0.52). Episode 2 had an average of quality 4.67 (S.D. = 0.52). Episode 3 had an average of quality 4.74 (S.D. = 0.44). The score of the digital empathy skills that students took after study on the interactive simulation video was 93.11% (knowledge 90.00%, practice 96.67%, attitude 92.67%). Thus, interactive simulation videos are effective in enhancing students' digital empathy skills.

11:45-12:10

74591 | *NatPro LabPro: Development and Evaluation of Innovative Laboratory Package in Science*

Ricky Acanto, Carlos Hilado Memorial State University, Philippines

Ignacio Jr. Tibajares, West Visayas State University, Philippines

Challenges in teaching science necessitate innovation – developing new methods and materials to ensure the best learning experiences for students. The study aimed to develop and evaluate the innovative laboratory package in science (ILPS) intended for science investigatory/capstone projects in natural product screening. The study adopted the developmental research design and followed ASSURE model of instructional systems design anchored on the constructivist theory. The study revealed that the least common laboratory analyses/tests used by students and teachers in conducting science investigatory/capstone projects in natural products were basic pharmacological-toxicological, antioxidant, and cytotoxic assays of plant extract, respectively. The availability of laboratory materials and financial support were moderately challenging for participants. Laboratory analysts validated the ILPS as outstanding, and STEM teachers' evaluation of the ILPS in content, structure, coherence, learning activities, usefulness, general appearance and organization, and innovativeness is outstanding. For the teachers' experience in using the ILPS, the following themes were gleaned from their responses: (a) new, meaningful and engaging experience; (b) learning opportunities that promote critical thinking and scientific attitude; (c) easy and flexible experiments; (d) practical tasks that equip students with new scientific skills; (e) cost-effective instructional innovation. The ILPS has the potential to facilitate science investigatory/capstone projects and develop students' and teachers' research expertise in plant screening. Curricularists may use the study's findings to create innovative learning resources and prioritize curricula innovations.

12:10-12:35

75851 | *E-module in TVET: Unveiling Brazing and Riveting Methods Through VAK Learning*

Suhaizal Hashim, Universiti Tun Hussein Onn Malaysia, Malaysia

Nur Alianni Mohamad Ali, Universiti Tun Hussein Onn Malaysia, Malaysia

Saiful Hadi Masran, Universiti Tun Hussein Onn Malaysia, Malaysia

The matter concerning electronic modules (e-modules) in Technical and Vocational Education and Training (TVET) pertains to the incorporation and utilization of electronic learning resources within vocational education systems. The topics under consideration encompass inadequate digital infrastructure, restricted technical accessibility, varying levels of digital literacy among educators and learners, and the necessity for comprehensive training and support in the integration of e-modules. The primary objective of this project is to develop an instructional e-module specifically designed for vocational institutions offering refrigeration and air conditioning programs. The lesson encompasses the topics of brazing and riveting as methods for connecting metal. The resources are designed to cater to the needs of learners with different sensory preferences, including visual, auditory, and kinesthetic (VAK) learners. This e-module utilizes scholarly reference materials to facilitate the acquisition of knowledge for both educators and students. The ADDIE model served as a guide for developing the e-module, as the researcher uses a comprehensive framework that includes analysis, design, development, implementation, and assessment to construct the e-module for the fabrication of piping, tubing, and metal. The present study assessed the usefulness of the learning e-module through the utilization of a semi-structured interview. The interview data will undergo thematic analysis and evaluation, employing Cohen's kappa statistic to ascertain the level of agreement regarding the efficacy of the e-learning module. The present investigation determined that the e-module exhibits qualities of interest and suitability for use as a reference tool. The intended purpose of this learning e-module's design is to provide assistance.

12:50-14:05 | Room 705

# Thursday Onsite Presentation Session 3

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Huiying (Cynthia) Hou

12:50-13:15

75992 | *Entrepreneurship Education for the Masses: Can Serious Games Teach Entrepreneurship to Large Classes?*

Hui Yan Yeong, Sunway University, Malaysia

Entrepreneurship education is gaining traction these past years. Higher education institutions (HEIs) around the world have been incorporating entrepreneurship education into their curriculum. As the demand for entrepreneurship education grows, the challenges in delivering effective entrepreneurship education, especially to the masses, become more and more evident. Scholars have argued that entrepreneurship is best learned through experiential learning, where the students practice entrepreneurial mindset and skills. However, this method of learning possesses great challenge to HEIs that intend to offer entrepreneurship education to large cohorts of students from all academic background. This study hence investigated the potential of serious games as the alternative for the much-needed experiential learning component in entrepreneurship education for HEIs that aim to offer it to the masses of students. The context of this study is set within a Malaysian private university that aims to offer entrepreneurship education to several thousands of students from different academic background in 3 years-time. A specially designed, web-based online serious game was incorporated into the entrepreneurship module and tested for the first time for 147 students during a recently concluded semester. Feedback was collected and analysed based on lead lecturer and academic tutors' in-class observation on students' responses, anonymous students' survey and end of semester teaching evaluation. The preliminary findings show that the students were indeed able to learn several key entrepreneurial mindset and skills while playing the specially designed serious game. The key lessons that the students learned including risk taking, resilient, problem solving, and communicating with others.

13:15-13:40

71790 | *Applying Augmented Reality in Visual Communication Design Department: How do Vocational Teachers Think about it?*

A Suci Rizky Ananda, Yogyakarta State University, Indonesia

Haryanto Haryanto, Yogyakarta State University, Indonesia

Ashadi Ashadi, Yogyakarta State University, Indonesia

Nowadays, the learning in the class requires new media for improving the understanding of materials which is delivered to the students. It is conducted because technology has provided new features to make learning easier. Therefore, applying augmented reality as a new media for learning, especially in the Visual Communication Design department is prominent to be elaborated. The study aims to explore how teachers think about applying augmented reality. This study was phenomenology research. The participants of this study were 6 vocational teachers for Visual Communication Design subjects in West Celebes in Indonesia. The data collection was conducted by depth interview, and the data analysis was performed using thematic analysis by help table (manual) and ATLAS.ti. The data analysis generated two themes such as the weakness and strength of PowerPoint or Canva media, and the benefit of applying augmented reality in the Visual Communication Design department. The framework of the way of thinking about the themes was also displayed in this essay. The findings of this research showed that PowerPoint or Canva had more weaknesses than strengths for photography subjects. Another information was obtained that augmented reality was totally helpful for improving the understanding of photography, because it has 3D features and the materials were presented by new technology. Briefly, new features in augmented reality make vocational students more interesting, because they can watch the 3D animation about the lesson from their smartphone.

13:40-14:05

74726 | *Feasibility and Acceptance of Micro-Video as an Innovative Teaching Method in Engineering Education*

Huiying (Cynthia) Hou, The Hong Kong Polytechnic University, Hong Kong

Jiaqi Wang, The Hong Kong Polytechnic University, Hong Kong

The growing interest in innovative teaching methods within higher education has prompted an exploration of micro-videos as a valuable intervention tool. Grounded in the Technology Acceptance Model (TAM) theory, this study investigates the feasibility and acceptance of micro-videos as a teaching method in engineering education, while also identifying the factors that influence students' acceptance of this approach. The study was conducted in three stages. Firstly, semi-structured interviews were conducted with 30 engineering students to gather insights and formulate a TAM-based theoretical model for measuring student acceptance. Secondly, an experiment involving 452 year-2 engineering students from a university in Shandong, China was conducted. The experiment incorporated a pre-view-test, micro-video viewing, post-view survey, and a post-test. Results indicated a significant 20% increase in post-test scores, indicating improved knowledge acquisition and confirming the effectiveness of micro-video teaching. Furthermore, the study identified that the "quality of the framework" and "quality of the content" of the micro-videos significantly influenced students' attitudes toward using this teaching method. Additionally, the classic TAM model, which examines the relationships among "perceived ease of use", "perceived usefulness", and "attitude toward using the micro-video", effectively predicted students' acceptance of this innovative teaching method. This study provides important implications for the future development of innovative teaching methods. By understanding the feasibility and factors affecting acceptance, educators can harness the potential of micro-videos to enhance engineering education.

14:20-15:35 | Room 705

# Thursday Onsite Presentation Session 4

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Hung-Hsiang Wang

14:20-14:45

76065 | *Virtual Reality as Supplementary Education Tool for Pharmacology Laboratory Practical: The Effect on Student Experience, Knowledge and Confidence*

Mei Kee Lee, University of Nottingham Malaysia, Malaysia

Su Ting Yong, University of Nottingham Malaysia, Malaysia

Kang Nee Ting, University of Nottingham Malaysia, Malaysia

Jing Ying Wong, University of Nottingham Malaysia, Malaysia

Nurfatin Saaidah Binti Zainal, University of Nottingham Malaysia, Malaysia

Eunice Zhi Nee Lua, University of Nottingham Malaysia, Malaysia

Virtual Reality is an emerging educational technology that supports immersive and engaging learning experiences. In this study, a Virtual Reality Organ Bath Lab (VROBL) was developed to simulate the physical laboratory practical, helping students to comprehend complex pharmacological principles. The study aimed to investigate the impact of VROBL adoption as a pre-laboratory experience on learning experience, knowledge, and confidence levels. An experimental research study was conducted with 17 health science students enrolled in a Biomedical Science module. The participants were divided into intervention (n=9) and control groups (n=8) using block randomization. The intervention group experienced virtual learning with VROBL before the physical laboratory session, while the control group experienced VROBL after the laboratory session. A pre-post study design was adopted, whereby questionnaires were administered before and after the VROBL and physical laboratory sessions. The completion times of physical laboratory tasks were recorded. Data collected revealed that the intervention group was satisfied with the simulation (mean±SD: 4.97±1.24) and learning content (mean±SD: 5.81±1.21) of VROBL. Furthermore, the intervention group reported an increased confidence in explaining the experimental procedures correctly compared to the control group (mean: 4.77 vs. 3.44, p=0.044). The finding was supported by positive feedback of VROBL as a pre-laboratory exercise. However, there was no significant difference between both groups in knowledge quiz scores and completion times of physical laboratory tasks. Although VROBL did not improve student knowledge or performance in the physical laboratory, it had enhanced student learning experiences and confidence, which ultimately might improve student motivation and learning outcomes.

14:45-15:10

76581 | *Machine Learning Tools Improve Students' Motivation to Learn Computational Thinking*

Hung-Hsiang Wang, National Taipei University of Technology, Taiwan

Chun-Han Wang, University of California, United States

Computational thinking is widely recognized as the key to design students' creativity. While most studies focus on teaching coding to students to develop their computational thinking, there is a lack of interest among design students who have minimal or no coding skills. This study aims to improve students' motivation for learning by introducing machine learning tools into product design processes. A quasi-experiment was conducted among 56 design students at a university. Participants attended workshops for six weeks and a total of 18 hours, and statistical analysis was carried out by multivariate analysis of variance and covariates. The results show that the correlation of general motivation for learning and computational thinking skills in the group that uses the Weka machine learning tool is significantly higher than those in the group that does not use the tool. However, there was no significant difference between learning strategies and cooperative and critical thinking between the two groups. This study suggests that learning software tools without code improves learners' motivation and computational thinking skills.

15:10-15:35

75629 | *Competition, Boon or Bane? Prior Knowledge Moderates the Effects of Competition in a Virtual Reality Game for Environmental Education*

Shirley Ho, Nanyang Technological University, Singapore

As plastic waste remains a global environmental threat, interest in new modes of environmental education to effect positive impacts on pro-environmental knowledge, attitudes, and behaviors is increasing. This study extends research on the use of serious games in virtual reality for shaping motivational and learning outcomes that encourage behaviors oriented toward plastic waste mitigation. Guided by the self-determination theory, this study examines how competition in the game affects motivational and learning outcomes (i.e., self-efficacy, environmental locus of control, attitude, and intention to learn) important for producing behavioural change. Specifically, we investigate the effects of a game element—competition—that has had an inconsistent influence on serious game players' motivation and learning. Furthermore, we explore if the effects of competition could be moderated by a third variable—prior knowledge about the game topic. We conducted a 2 (Game environment: Competition vs. Non competition) x 3 (Prior knowledge: Low vs. Medium vs. High) between-subjects experiment with 61 undergraduates in Singapore. We developed an educational virtual reality game focused on plastic waste reduction in Singapore for the purpose of this study. Based on two-way analysis of variance tests, we found that competition had differential impacts based on prior knowledge, where players with medium levels of prior knowledge reported greater motivational and learning outcomes compared to players with low and high levels of prior knowledge. These findings shed light on the inconsistent effects of competition in the extant literature and provide notable theoretical and practical contributions to research on virtual reality technologies in education.

16:15-17:55 | Room 705

# Thursday Onsite Presentation Session 5

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: A.Y.M. Atiquil Islam

16:15-16:40

75049 | *Learning Addition and Subtraction of Fractions Using Indigenous Materials: The Case of Dumagat Elementary Students in the Philippines*

Heidi Lynn Faustino, Ateneo de Manila University, Philippines

Flordeliza Francisco, Far Eastern University, Philippines

Catherine Vistro-Yu, Ateneo de Manila University, Philippines

This qualitative study investigated the benefits of using indigenous materials in learning addition and subtraction of fractions. Twenty-one Grade 4, 5, and 6 students in a public school located in the remote area of Bulacan, Philippines participated in the study. The research studied the students' ability to transition across Bruner's (1966) modes of representation (enactive-iconic-symbolic) and their levels of motivation as facilitated by the indigenous materials prepared by the researcher for use in the daily lessons. The principles of Realistic Mathematics Education (RME) influenced the design of the lessons. This study took into consideration the Dumagats' culture, particularly their livelihood activities and family relationships. The researcher designed the manipulative materials utilizing bamboo sticks (kawayan), woven trays (bilao), and betel leaves (dahon ng ikmo) which are readily found in the students' natural environment. An in-depth analysis of the worksheets and post-test results reveal that there is evidence of learning among students since they achieved some of the learning competencies prescribed in the Philippine K-12 Basic Education Curriculum. Results of the study showed that the specially designed lessons on addition and subtraction of fractions using indigenous materials facilitated students' transition to the symbolic mode of representation by only some students. There is also evidence that the use of these materials contributed to the high levels of motivation exhibited by the Dumagat students throughout the learning sessions. Recommendations for further research, improvement of the indigenous people (IP) school curriculum, and enhancement of teaching practices to create culturally sensitive mathematics classrooms are proposed.

16:40-17:05

76127 | *School Websites as Mechanism for Good Governance Basis for E-Governance Initiatives*

June Bence Adelan, Schools Division Office of Imus City, Philippines

Glenda Catadman, Schools Division Office of Imus City, Philippines

Marycon Carmela Mella, General Emilio Aguinaldo National High School, Philippines

Websites are believed to be the central public information sharing networks which potentially involve the public in communicating, participating, and sharing public information and services (Sandoval-Almazan & Gil-Garcia, 2012); hence, the crafting of the national government's E-Government Master Plan (EGMP) in 2012. In compliance with EGMP, the Schools Division Office of Imus City implemented Project WEBBSS (Websites for Better School Services) to encourage all 35 schools to have its own website. To ensure that E-Governance is implemented, the study examined the websites' content and the perception of end-users, with an aim to create an E-Governance Action Plan. The study employed a descriptive design, using content analysis on school websites and survey-questionnaire for end-users. Results show that school websites had gaps in every indicator of E-governance: Transparency; Delivery of Services; Public Engagement; Security; and Effectiveness. End-users agree on its accessibility, accuracy, acceleration, and information; however, they disagree on its effectiveness for service delivery. An E-governance action plan was crafted to address the issues revealed in the study. The action plan has specified programs and actions under: Infrastructure; Policy Planning; Training and Development; and Monitoring and Evaluation. The research recommends further improvement and sustainability of school websites; stakeholder participation and involvement, and; policy recommendations towards full implementation of E-Governance.

17:05-17:30

71068 | *Testing the Online Database Adoption and Satisfaction (ODAS) Model Across Cultures: A Three Country Study*

A.Y.M. Atiquil Islam, East China Normal University, China

In the 21st century, digital libraries have extensively recognized the inclusion of emerging online databases for learning and research purposes throughout the world. However, literature exhibits the inadequate empirical assessment of databases in higher education. Thus, this study aims to test the Online Database Adoption and Satisfaction (ODAS) Model for determining Chinese, Malaysian and Pakistani graduate students' adoption of and satisfaction in using databases. This research also cross-validates the ODAS model for identifying significant differences across countries. To test the cross-validation of the ODAS model, data was collected through a survey of 600 graduate learners studying in universities in China, Malaysia, and Pakistan. The ODAS model was tested using the Rasch model and structural equation modeling across cultures and identified the applicability of the model for Chinese, Malaysian, and Pakistani students in assessing their adoption and satisfaction based on five components: computer self-efficacy, intention to use, satisfaction, perceived usefulness, and ease of use. These determinants had causal direct and indirect relationships among themselves. The findings of the cross-validation of the ODAS model were tested using invariance analyses and exhibited that there are statistically significant differences among the students of three countries. Future researchers, academicians, and practitioners can use the contributions of this study to aid them in assessing, comparing, and implementing research databases in higher education.

17:30-17:55

73051 | *Online Religious Education Among Second Year College Students of De La Salle Medical and Health Sciences Institute: A Phenomenological Inquiry*

Myra Patambang, De La Salle Medical and Health Sciences Institute, Philippines

Religious Education is a key factor in the evangelization aspect of the mission of St. John Baptist de La Salle, the Founder of the Brothers of Christian Schools and La Salle Institutions worldwide. Religious Education is not merely concepts and doctrines, there must be the affective and psychomotor domains. Given the new normal and the signs of the times, it is extremely essential that religion teachers get abreast with the students who had been suddenly thrown into the digital world of education, virtual relationships and survival in all its facets. This dissertation is a pioneering study about Filipino Generation Z cohort who have undergone online Religious Education in one of the schools of De La Salle Philippines. The paper utilized the existential-phenomenological method. It was an exploration of ideas, perceptions and motivations behind conscious behaviors and responses to situations that comprise human experience. Existential because the study dwelt on the concrete situations and experiences of the students who have attended pure online Religious Education classes. Likewise the study contains a characterization, description, and discernment about the dreams and aspirations, hopes and fears of Generation Z as they survived and thrived through the global pandemic. Declaration on Christian Education, Lasallian Spirituality, Creation Spirituality and Spirituality in general were some of the references upon which the reflective narratives, textual themes, structural themes and eidetic insight were drawn. The narratives revealed how Religious Education gets across the digital natives. The rigors of phenomenology gave birth to a proposed integration program for the Institute.



09:00-10:40 | Room 707

# Thursday Onsite Presentation Session 1

Foreign Languages Education & Applied Linguistics

Session Chair: Laila Familiar

09:00-09:25

75211 | *Cognitive Discourse Function and Multimodal Conceptualization: The Interactive Usage of Language, Multimodality, and Cognition in Bilingual Teaching Context*

Tiffany Lin, National Taipei University of Education, Taiwan

This study aims to examine the realization of Cognitive Discourse Function and multimodal conceptualization in the context of bilingual teaching materials in Taiwan elementary schools. Based on a usage-based cognitive analysis, our data will classify how different categories of Cognitive Discourse Function (CDF) can be realized through language and multimodality in bilingual teaching and learning contexts to enable bilingual teachers to instruct and guide the students to achieve the educational goals and to help the students comprehend and conceptualize the abstract, complicated, or new concept, take the actions, and present their ideas or opinions through the learning process. This study proposes to extend significant findings in previous studies on language and multimodality (Lin, 2015 and Lin & Chiang 2016; Lin, 2018) to modify the methodology of multimodal analysis and incorporate the tenets of Cognitive Discourse Function (DaltonPuffer, 2013) to adopt the cognitive function-based analyses to examine the teaching materials, including bilingual text books, multimodal resources, activity sheets, and curriculum guidelines, etc. This study aims to demonstrate that the interactive use of language and multimodality not only helps to achieve the cognitive discourse functions efficiently but also enables the students to (1) facilitate the interpretation process when they start to learn new things or difficult concept; (2) strengthen the motivations to achieve educational goals effectively; (3) create the opportunities to reach the shared goals; (4) learn to help, share, and cooperate with each other through multimodal conceptualization, interaction, and engagement in the classroom.

09:25-09:50

75626 | *The Influence of Collaborative Learning on Non-English Majors' English Speaking and Listening Performance*

Chunying Wang, National United University, Taiwan

Taiwanese students begin learning English in primary school, but most of them are not able to fluently communicate in English. The present study employs a collaborative learning activity in an experiment to investigate its influence on 106 Taiwanese non-English major freshmen's learning situation for English speaking and listening. Data were collected by observing students' learning behaviours in both the experimental and control groups for a term, their pre-test and post-test scores, and a questionnaire survey. From these observations, the experimental group participants transitioned to have more active learning behaviours than the control group by the end of the term. The statistical results show that studying with collaborative learning can promote learners' communicative competence. Furthermore, all participants gave positive feedback on the course arrangement, but the experimental group participants indicated a significantly stronger attitude towards the collaboration experience. Having more opportunities to practice speaking and listening to English, the participants received the language more favourably after learning it using collaborative learning.

09:50-10:15

75501 | *Listening Strategies Utilized by Thai Students to Enhance the Listening Comprehension of ASEAN Englishes-Accented Conversations*

Wachirapong Yaemtui, Srinakharinwirot University, Thailand

Listening is recognized as an essential language skill for being a successful communicator in both educational and professional contexts. Despite its importance, listening comprehension is perceived as one of the most complicated tasks for language learners, especially the comprehension of non-native English accents. It is considered that knowing which listening strategies should be utilized and how to apply those strategies are very significant for achieving listening comprehension of non-native English accents. Therefore, this study aimed to investigate and compare the listening strategies (i.e., cognitive, metacognitive, and socio-affective) utilized by high-ability and low-ability listeners to comprehend ASEAN Englishes-accented conversations. Overall, 200 participants were required to report their perceived use of listening strategies by completing a questionnaire adapted from the Strategy Inventory for Language Learning (SILL), followed by explaining their use of these strategies in detail through the think-aloud task. The findings reveal that the high-ability listeners deploy overall listening strategies significantly more frequently than the low-ability listeners. The high-ability listeners also tend to know better which strategy should be utilized and how to successfully apply these strategies in a systematic way to achieve the listening comprehension of ASEAN Englishes-accented conversations. Based on the findings, strategy-based instruction is recommended for training low-ability listeners to apply listening strategies effectively and appropriately to achieve listening comprehension.

10:15-10:40

72892 | *Re-Imagining Language Teacher Education: Agency, Innovation, and Vulnerability*

Laila Familiar, New York University Abu Dhabi, United Arab Emirates

Geri Atanassova, The Ohio State University, United States

Student agency in the classroom is considered a key element in promoting students' engagement, in unleashing their creativity, and in helping them take control of their own learning. We celebrate agency when it's enacted by students, and we promote it; but how do language teachers in higher education institutions understand the concept of 'teacher agency'? In what professional areas do teachers exercise their agency? What are some lived experiences that make it easier or harder for teachers to exercise their agency? The aim of this exploratory study is to address a gap in the field by investigating the experience of a group of Arabic teachers that work in higher education institutions, in relation to their understanding and enactment of their agency, both in the classroom and in their professional lives. The methodology followed to investigate teachers' experiences, perceptions, values, attitudes and beliefs towards the concept of teacher agency is phenomenology (Cohen et al 2018, Webb & Welsh 2019), as a type of research that is well suited to capture qualitatively and in-depth the lived experience of teachers, individually and collectively. Over a hundred teachers of Arabic from around the world were surveyed, and fourteen interviewed via an online video platform. Given that teacher agency has such a strong influence in shaping the quality of classroom instruction (Priestley 2011) and the professional development trajectories of language teachers, this as a priority research area in the field of language teaching and education at large.

10:55-12:35 | Room 707

# Thursday Onsite Presentation Session 2

Foreign Languages Education & Applied Linguistics

Session Chair: Virginia Yip

10:55-11:20

73879 | *Integrating Critical Thinking Into English Argumentative Writing Class Through Six Thinking Hats: A Case Study of a Chinese University*

Chang Liu, Newcastle University, United Kingdom

Mei Lin, Newcastle University, United Kingdom

The importance of critical thinking for tertiary-level students is widely acknowledged. However, it is rarely taught explicitly. Argumentative writing is the most prevalent genre in diverse writing tests and critical thinking is the core. How to construct academic arguments is often regarded as a difficult task by most English as a foreign language (EFL) learners. Many teachers are passionate about integrating critical thinking into their EFL writing class, but are puzzled as to where to start. This presentation discusses the learning outcomes of an integration of De Bono's Six Thinking Hats to teach critical thinking for English argumentative writing. 59 first-year students from a Chinese university participated in a twelve-week teaching intervention. Multiple sources of data were collected on students learning to generate ideas for their arguments. This talk, drawing from group discussion data collected at different weeks over the intervention, enables teachers and researchers to 'see' the hidden process of learning to develop ideas for argumentative writing in action. The findings have pedagogical implications for teachers to integrate teaching thinking into subject teaching as well as engaging students in developing 21st Century skills (Critical Thinking, Creativity, Collaboration, Communication) and having fun in the process.

11:20-11:45

75572 | *A Case Study of Chinese EFL University Learner's Reading Motivation: A Complex Dynamic Systems Theory Perspective*

Jianjun Li, The Chinese University of Hong Kong, China

Based on complex dynamic systems theory (CDST) (Larsen-Freeman & Cameron, 2008), the present study adopted a longitudinal sequential mixed-method research (MMR) approach with a quan->QUAL design and a triangulation purpose (Riaz, 2017) to unravel a Mainland Chinese EFL learner's reading motivational complexity and dynamism over a half academic year (six months). Alex, a male 20-year-old year-2 accounting major, was selected as the participant in this case study. The Chinese Reading Motivation Questionnaire (CRMQ), an adapted version of MRQ (Baker & Wigfield, 1999), was administered first to measure Alex's EFL reading motivational intensity over time, followed by a concurrent semi-structured interview. This coupled data collection procedure was repeated four times over the half academic year. The line chart was employed to visually display the data in CRMQ, identifying the changes and developmental trends of reading motivation over time. The content analysis approach was used to analyze the qualitative data, unraveling the influential factors and their joint efforts to shape Alex's reading motivational development in the time dimension. This study found that reading motivation manifested five typical CDST features, i.e. complexity, dynamism, attractor states, non-linearity and reliance on contextual factors. Reading comprehension and contextual factors (teacher, reading materials, teaching style, father's encouragement and international news) that showed variation over time intertwined to shape the reading motivational dynamic and complex nature in the time dimension. Self-regulation also plays a regulatory role in shaping the reading motivational development in the time dimension.

11:45-12:10

73289 | *Achievement of Thai EFL Students Through the English Science Textbooks Word Lists (ESTWL) and Content and Language Integrated Learning (CLIL)*

Thana Kruawong, Thammasat University, Thailand

Supakorn Phoocharoensil, Thammasat University, Thailand

The creation of subject-specific word lists to assist EFL learners is becoming popular, as is the utilization of CLIL to teach English across science academic areas. The purpose of this research was to examine the effects of the integration of English Science Textbooks Word Lists (ESTWL) and CLIL approach on Science Technical Vocabulary Knowledge and Science Content Learning Achievement of Thai EFL students. There are two phases regarding the methodology, (1) the development of ESTWL and (2) the implementation of the ESTWL and CLIL in the classroom settings. During this pre-experimental research, a pretest-posttest design was adopted. The target groups were three levels of secondary schools (Grade 7-9), studying at a large secondary school in Bangkok. The research instruments included lesson plans and vocabulary knowledge and science achievement tests. All research instruments were validated by both content and language experts. The data was analyzed using a dependent sample t-test. The research findings were as follows: 1) the mean of the student in three groups increased by a statistical significance of 0.05. in both vocabulary knowledge and science achievements scores after the implementation of the intervention, and 2) the qualitative results indicated that all students held positive attitude toward the integration of ESTWL and CLIL approach. The ESTWL aims to assist lower secondary school students in their preparation for the learning in science classrooms. Additionally, ESTWL can be applied in vocabulary pedagogy for science and language teachers in selecting appropriate vocabulary to teach in their CLIL environments.

12:10-12:35

75810 | *An Analysis of English Vocabulary in Hong Kong Textbooks for Bilingual Children*

Chris Law, The Chinese University of Hong Kong, Hong Kong

Stephen Matthews, The University of Hong Kong, Hong Kong

Virginia Yip, The Chinese University of Hong Kong, Hong Kong

Vocabulary acquisition is central to building literacy, yet there is not much research on the vocabulary component of textbooks for school children (Nordlund, 2015). Acquiring the vocabulary of a language is commonly interpreted as "knowing the meaning of the words and being able to use the words". However, Nation (2019) proposes that knowing a word involves nine aspects. As a primary and nearly compulsory learning material for such a significant number of school children (333,551 in 2022/23) who speak Chinese as L1 and English as L2, the impact of childhood print exposure to English textbooks on their L2 lexical diversity calls for investigation. The study of Brown (2010) on vocabulary activities in English textbooks shows that a single aspect of vocabulary knowledge – form and meaning – receives the most attention in the textbooks, while two other aspects – grammatical functions and spoken form – also receive attention. The other six aspects receive little or no attention. Unlike Brown's results, our study shows that among the most popular primary English textbooks in Hong Kong (2 publishers; 24 textbooks), four aspects – form and meaning, written form, grammatical functions and spoken form – receive comparable attention, while the other five aspects receive little or no attention. This study hopes to inform researchers and industry collaborators concerning the need to consider a more holistic view of vocabulary knowledge, thus enhancing children's L2 lexical diversity via their print exposure and interventions, including shared reading (Lefebvre, 2011) and cross-linguistic influence (Yip & Matthews, 2007).

12:50-14:05 | Room 707

# Thursday Onsite Presentation Session 3

Foreign Languages Education & Applied Linguistics

**Session Chair: Sawaros Jaiprasong**

**12:50-13:15**

75374 | *Infographics in EFL Speaking Class: How it is Used and its Effect on Higher EFL Students' Speaking Skills*

Sintya Dewi, Ganesha University of Education, Indonesia

Padmadewi Nyoman, Ganesha University of Education, Indonesia

Artini Luh Putu, Ganesha University of Education, Indonesia

Sri Adnyani, Ganesha University of Education, Indonesia

Made Hery Santosa, Ganesha University of Education, Indonesia

The biggest challenge in mastering EFL is to use the language itself in speaking. Distractions like nervousness, low self-confidence, high anxiety, and low proficiency in English used to hinder the quality of students speaking performances. Thus, using effective media like infographics could help students to cover up those distractions and have better speaking performances. This study was conducted to discover the effect of infographics implementation on students' speaking skills in the Indonesian EFL context. This research was carried out at Ganesha University of Education, especially in English Language Education Program and sixty students were involved as the participants. This research used an embedded mixed-method design in which the qualitative was collected through observation and questionnaire. Meanwhile, quantitative data were collected through a speaking performance test. The findings of the qualitative analysis revealed that the lecturer employed infographics with different roles in pre-activity, while-activity, and post-activity during the speaking classes. Then, the result of students' responses showed that 97% of students responded positively to the use of infographics as the learning media and stated that the use of infographics as learning media improves students' speaking skills. Meanwhile, quantitative data analysis revealed that students in the experimental group performed better in speaking than students in the control group.

**13:15-13:40**

76312 | *Framing for Impact: Using Rhetorical Devices for Making Effective Speeches*

Shravasti Chakravarty, XLRI Delhi-NCR, India

A commonly identified behavioural skill in effective leadership communication is framing. This is identified on the basis of linguistic and paralinguistic elements that define and align with the leadership goals of the organisation and the associated individuals. Consequently, in this study the teacher-researcher endeavours to identify the tenets of framing that are easiest to integrate in a prepared speech after providing the necessary instructions. Data was collected from 116 students of an executive MBA programme as part of their managerial communication course. After receiving detailed instructions participants undertook the speech writing task. Some of the components that were observed in their speeches included their ability to amplify their beliefs, values, mission statement, identify antagonists to the mission, and efficacy of the mission itself. The speeches were also analysed for the use of rhetorical devices such as the use of ethos, pathos, and logos; using speech techniques like repetition, rhythm, balance and alliteration. To further test the effectiveness of the framed speech, the participants presented them under testing conditions. These were video recorded and then analysed using a variety of parameters such as manner of speaking, the language used, delivery of the content, intonation used, the pace of speaking, adherence to the pre-decided time, body language (gestures, eye contact, facial expressions), word per minute count and so on. The findings of the study have implications for teachers providing instruction in the area of writing and delivering framed speeches that form an integral part of effective leadership communication.

**13:40-14:05**

75085 | *Investigation of Undergraduate Students' Pausing in English Speaking*

Sawaros Jaiprasong, Thammasat University, Thailand

Pauses have an impact on how well listeners comprehend and focus on the meaning of discourse (Bae, 2015). This study was aimed at investigating what types of pauses undergraduate students made during speaking and why undergraduate students made pauses during their English speaking. The types of pauses focused on in this study were silent pauses, lexicalized filled pauses, and unlexicalized filled pauses. The participants of this study were 40 Thai undergraduate university students studying for a bachelor's degree at a university in Bangkok, Thailand. This study was conducted using a mixed-methods approach. Quantitatively, the demographic data of the participants was collected. Moreover, the participants were tested on their ability to produce a 2-minute English speech based on the prompt provided to investigate their pausing. There were four speaking prompts based on the topics and content they had previously studied. Then, the frequency of pausing during their speech production was collected. Qualitatively, a retrospective verbal protocol method was conducted on the same day of data collection to explore factors affecting the participants' pauses during speaking. The results showed that both male and female students employed silent pauses the most among the three types of focus, and the percentage of silent pauses made by the two groups of students was quite identical. Furthermore, the results obtained from the retrospective verbal protocol reflected that the reasons behind the students' pausing were thinking of the content, hesitating to produce some grammatical structures, and thinking of vocabulary and word uses, respectively.

14:20-16:00 | Room 707

# Thursday Onsite Presentation Session 4

Foreign Languages Education & Applied Linguistics

Session Chair: Ian Davison

14:20-14:45

74816 | *Comparing the Performances of Grammarly and ChatGPT in Correcting ESL Writing Errors*

Haojan Chen, National Taiwan Normal University, Taiwan

The research on grammar checking systems has been conducted for a considerable period of time. In recent years, Grammarly has been widely recommended and has garnered impressive acclaim. In November 2022, OpenAI ChatGPT emerged, making a significant impact across multiple research fields. To compare the performances of Grammarly and ChatGPT-based checker, this study utilized example sentences from a renowned reference book called "Common Mistakes in English" (Fitikides, 2002) by Longman. The data set includes 584 typical errors made by non-native English speakers. The results obtained in this study are interesting. In terms of un-English expressions, Grammarly corrected only 22% of the errors, while ChatGPT successfully revised 75% of them. Regarding cases of incorrect omissions, Grammarly corrected only 48.7% of the errors, whereas ChatGPT accurately revised 85% of them. In the areas of misplaced words, Grammarly rectified only 33% of the errors, while ChatGPT achieved an impressive 89% correction rate. In terms of confused verbs, Grammarly addressed only 14.8% of the errors, whereas ChatGPT accurately revised 85% of them. In the case of confused nouns, Grammarly failed to correct any errors, whereas ChatGPT correctly revised 86% of the 21 errors. Finally, for the confusion of parts of speech, Grammarly corrected only 43% of the errors, while ChatGPT achieved a 77% accuracy rate. Based on these results, it is clear that ChatGPT achieves remarkably high levels of accuracy, ranging from 75% to as high as 89%. This result clearly demonstrates ChatGPT's significant improvement in precision when correcting ESL errors.

14:45-15:10

73016 | *Theorising Agency as Complex Dynamic Systems: Evidence from Language Learner Narratives in Private Tutoring*

Kevin Yung, The Education University of Hong Kong, Hong Kong

The recent dynamic turn in second language acquisition (SLA) research has called for an investigation in learner agency by taking its complex dynamic nature into account. Informed by the complex dynamic systems theory (CDST), this study investigated the agency of learners in a complex educational context where mainstream schooling and private tutoring, i.e. shadow education, coexist, and when teaching and learning was switched online. Through longitudinal narrative inquiry, this study analysed the experiences of three senior secondary students enrolled in online English private tutoring. Data were collected through three rounds of individual interview and two pieces of learner reflective writing, supplemented by artefacts such as their language learning materials and interviews with their tutors, schoolteachers and parents. The multiple sources of data collected for one year were compiled as narratives for analysis. The findings highlight the importance of considering learner agency from the CDST perspective, acknowledging its characteristics such as its relational, ecological, emergent nature, and its spatiality, multidimensionality and sustainability. This study sheds light on the complex agency-structure interplay in shadow education situated in the wider education context, and offers implications for educators to support language learners to be agentic in regulating their learning.

15:10-15:35

73550 | *How Peer Interaction in Collaborative Writing Can Help L2 Students to Learn About Correct Language Use*

Ian Davison, Rabdan Academy, United Arab Emirates

While writing collaboratively, second language students (L2) have the opportunity to discuss the language that they will use in their co-written work and they can also receive feedback from their peers on their language use, while making proposals for the co-written text, that may draw their attention to incorrect language use. These interactive processes provide learners with opportunities to learn about correct language use that are not provided by independent writing. However, there may be concerns about accuracy of the feedback that learners provide to each other and concerns about the ability of L2 students to effectively discuss language use. This study provides information about student interaction in L2 collaborative writing by reviewing 96 examples of collaborative writing dialogue to assess the types of interaction that take place, and the correctness of information that students provide. Through semi-structured interviews with L2 learners, it also outlines student opinions about the benefits and drawbacks of peer interaction in collaborative writing.

15:35-16:00

73333 | *Developmental Stages of L2 Syntactic Acquisition: An Empirical Study in Thai EFL Context*

Phisutsiam Nguangkhamnam, iFuture Institution, Thailand

This study aimed at identifying in which developmental stages the majority of Thai EFL university students were currently operating. L2 syntactic acquisition was empirically observed based on framework of English question formation developmental stages to cope with EFL learning difficulties. In this qualitative study, a total number of 120 intermediate – high university students were purposively selected as research participants. A Standardized 300D Test of Nelson English Tests was adopted to measure student's proficiency levels, and a picture-cued writing task was selected as research instrument to assess student's ability in wh-question formation. The total number of 120 writing works completed by 120 non-English major students at Kasetsart University, Kamphaeng Saen Campus was analyzed using Interlanguage Analysis. Based on research hypothesis, the result pointed out falsification as 51 participants were currently operating at the developmental stage 2: Aux 2nd, Do 2nd (42.5%), at the significance level of 0.01. In addition, it could be concluded according to the results that prerequisite knowledge of previous developmental stages might not be fully acquired beforehand. Pedagogically, this study also suggested a classroom model to cope with EFL learning difficulties in particular to syntactic acquisition.

16:15-17:55 | Room 707

# Thursday Onsite Presentation Session 5

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

Session Chair: Anne Ihata

16:15-16:40

75301 | *Designing a Syllabus for an EFL Documentary Production Course*  
Khadijah Omar, Kyushu University, Japan

This paper describes a project-based learning (PBL) syllabus for an English course where students are asked to produce documentaries based on interviews with people working in Japan. The course runs for one university quarter. Over a period of eight weeks, students analyse professional documentaries and then use the skills that they learn to interview their subjects and produce their own videos. In contrast to the usual English as a Foreign Language (EFL) video production courses, this one does not mandate wholly English content because authenticity is preferred over scripted replies in English. Most students opt for interviews in Japanese; this entails subtitling the responses to make them comprehensible to an English-speaking audience. The students' productive skills are thus developed through this subtitling task as well as a compulsory narration element. The present form of the syllabus is the fourth cycle of an action research project conducted over the past three years. While previous iterations of the syllabus used a rubric that only assessed the content and technical aspects in general, its simplicity made it difficult for students to determine exactly what the assignment wanted. Therefore, this latest version uses a detailed rubric to guide them. The structured marking criteria result in much more satisfactory, tightly-edited documentaries that fulfil the teacher's expectations. In future, the syllabus will include a subtitling component in addition to content and cinematography tips.

16:40-17:05

76031 | *Promoting Growth Mindset in Learning English for Undergraduate Students Through the English Language Growth Instructional Model*  
Chayachon Chuanon, Khon Kaen University, Thailand

This research aims to develop an instructional model to promote growth mindset in learning English for undergraduate students using research and development process. To examine the context, a literature review and a survey of growth mindset in English language learning from a sample of 392 undergraduate students who studied general English courses through cluster sampling and quota sampling were conducted. These were followed by the interview of ten university lecturers of general English courses selected by purposive sampling. Both the survey and interview were from eight universities from four regions in Thailand. The findings show that participants had mixed language mindset and that the excessive emphasis on testing may result in learners' fixed mindset. Besides, it was suggested that assessment, teachers' roles and communication styles should be changed with the enhancement of learner autonomy. The instructional model was then developed and validated by nine experts which contained seven teaching steps i.e., mindset check, activating growth mindset, goal setting, language practice, feed-forward, challenge, and reflection. It was implemented with 25 undergraduate student volunteers from Khon Kaen University for six weeks using action research model. The results from pre- and post- self-assessment, behavioral assessment, and reflective journals show that the participants have higher level of growth mindset, and the model was effective in promoting growth mindset. Nevertheless, challenges remain in integrating the model with a particular subject, as well as in teacher preparation. Therefore, it is important to evaluate teachers' readiness and analyze the context before implementing the instructional model.

17:05-17:30

72925 | *Thailand's English Language Education Landscape and Thainess*  
Analiza Liezl Perez Amurao, Mahidol University International College, Thailand

It is often said that the success of a nation state can be attributed to how it is able to construct its identity through the connection it makes with its own people and how the latter, in return, connect back with it, developing a collective sense of oneness at a national level and eventually paving the way for successful governance. While this can happen in many different ways and various sectors of society, the role of language articulated in a country's national language education policies is crucial in running nation states. In Thailand, where a collective effort emphasizing the importance of shared culture has served as a national project for years, examining how it has played out vis-a-vis the country's English language education is deemed crucial. Drawing from the concept of Thainess (kwam pen Thai), this study examines how said ideology has created an impact on the current state of Thailand's English language education. Employing data from existing public documents and related literature, this study uses document research methodology (DRM) aided by Norman Fairclough's categorical data analysis (CDA), allowing for a content analysis of gathered information. This study ultimately explores whether Thailand's language education policies and classroom practices embody Thainess.

17:30-17:55

76132 | *A Comparison of High School English Textbooks in Japan, Korea, and China: Do the Differences Significantly Affect the Outcomes?*  
Anne Ihata, Musashino University, Japan  
Takaaki Ihata, Nihon Daigaku & Kogakuin University, Japan  
Anyi Mao, Musashino University, Japan

English education in Japan, Korea, and China may display certain similarities, since they are all fundamentally monolingual societies, where citizens may not have much need for English on a day-to-day basis. They are all now keen to take advantage of the opportunities of globalization and recognize the importance of English in this context. In all three countries, the English education system has recently moved towards more communicative approaches, with Korea perhaps originally leading the way in this (Yuasa, 2010). Japan still tends to rank lower on international measures for its citizens' English skills than China or Korea (So, 2019), despite promoting English language classes in primary schools since 2011. In China and Korea, compulsory English lessons begin in the 3rd grade of primary school, but not until fifth grade in Japan (as a fully-assessed academic subject, although "English Activities" classes begin in third grade since 2020). Textbooks and other learning materials play a significant role in school education, and their capacity to stimulate and motivate learners is especially crucial at the high school stage when students are reluctant to risk losing face in potentially embarrassing communication activities. So, if other conditions are similar, it seems possible that these materials may differ in some important way(s). This is the focus of our study, comparing typical high school textbooks from the three countries from the aspects of volume of English words used per book chapter, common sentence length, topics, and amount of visual illustration of all kinds relative to written text.



09:00-10:40 | Room 708

# Thursday Onsite Presentation Session 1

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

Session Chair: Tengku Elmi Azlina Tengku Muda

09:00-09:25

73968 | *Perceptions of School Leaders about Inclusive Education in Relation to Diverse Social, Cultural and Ethnic Context in Nepal*  
Surendra Amgai, Kathmandu University, Nepal  
Ganga Bahadur Gurung, University of Tasmania, Australia

This study aimed at exploring how school leaders perceive and interpret inclusive education considering diverse social, cultural, and ethnic contexts of Nepal. This study was informed by the theoretical framework based on sociocultural theory. The study adopted phenomenology as a methodology that explored the experiences of school leaders about inclusive education as a phenomenon. School Principals representing all seven provinces were interviewed pertaining to their understanding of inclusive education and practices. In addition, a focus group discussion was conducted among the policymakers of inclusive education to enhance the credibility of the study. Preliminary findings indicated that school principals did not have a uniform understanding of inclusive education. It indicated that their qualification, exposure, and experiences in leadership play a decisive role in their understanding and practice of inclusive education. Still, the bigger issue lay in the practice of inclusive education at schools for various reasons. The findings of this study would be pertinent to all key stakeholders of inclusive education in a developing country's context as it has explored and presented perceived significant discourses about inclusive education among school leaders. This study would also provide some insights to educators on how to implement inclusive education to facilitate children from diverse backgrounds.

09:25-09:50

74758 | *Experiences of Teachers Handling Students with Twice-exceptionality*  
Mary Nhol Flores, Maya School, Vietnam

The study was conducted to investigate experiences of teachers handling students with twice-exceptionality. The identified students with twice-exceptionality fit in the operational definition of Gallagher (2006) as all three were diagnosed with Asperger's Syndrome but showed giftedness in the areas of languages and Science. A qualitative single case study was employed which used the transcribed interviews from the respondents for thematic analysis. The researcher looked into their successes along the process and sought to identify the issues and challenges that the teachers encountered along the journey. The findings included: (a) teachers handling students with twice-exceptionality had positive and challenging experiences; (b) teachers handling students with twice-exceptionality found effective strategies based on their experiences; (c) teachers handling students with twice-exceptionality encountered challenges and issues which were recorded in this study. The positive experiences of teachers handling students with twice-exceptionality included: teacher improvement and inspiring experience. The negative experiences included: required effort and no prior experience. The recorded successes of the teachers included: identification of the child's strength and constant communication, encouragement, follow-up works; communication with parents and use of Montessori Method. Moreover, the challenges and issues and problems by the teachers included: social or peer relationship, accepting defeats and teachers' lack of experience. The recommendations of this study are: for teachers to have training programs related to twice-exceptionality, an available recommended checklist on the characteristics of students with twice-exceptionality, specific policy/cies and other laws intended for students with twice-exceptionality, and for strengthened parent-teacher partnership to be continued.

09:50-10:15

74840 | *Profile of Socio-Emotional Issues of Gifted and Talented Students: A Counseling Approach Strategy*  
Tengku Elmi Azlina Tengku Muda, National University of Malaysia, Malaysia  
Nur Hidayah Muhamad Salleh, National University of Malaysia, Malaysia  
Rorlinda Yusof, National University of Malaysia, Malaysia  
Mohamad Rahim Kamaluddin, National University of Malaysia, Malaysia

Asynchronous development has caused socio-emotional conflicts among Gifted and Talented Students when their social and emotional abilities do not develop in parallel with their intellectual abilities. Therefore, this study aims to identify and explore the socio-emotional issues faced, as well as the effects of the problems and the factors that influence them. The study uses a mixed-method research approach, involving a total of 217 students from Basic 1 to Level 2 at Pusat Genius@Pintar Negara, UKM. The instruments utilized for this study include the Student Socio-Emotional Stress (ITSeP) questionnaire, The Overexcitability Questionnaire-Two (OEQII), and the Multidimensional Perfectionism Inventory. The results of the study related to perfectionism recorded high scores for all components, with the self-perfection component scoring the highest (4.58) and the component for perfectionism towards others scoring the lowest (4.08). The results of the study related to overexcitability showed that the emotional component recorded the highest value (3.75), while the psychomotor component recorded the lowest value (3.13). Regarding the analysis of emotional stress, the justice stress component recorded the highest value (4.07), while the family stress component scored the lowest (2.29). Qualitative findings reveal that the factors triggering socio-emotional problems are influenced by personal personality, genetics, and the environment, ultimately affecting daily life. The implication of this study is that it can serve as a reference for parents, educators, especially counselors, to understand the socio-emotional issues experienced by gifted and talented students. The information acquired will help to plan appropriate strategies to improve the holistic development of students.

10:15-10:40

74838 | *Emotional Intelligence, Leadership, and Personality Types of Gifted and Talented Students: An Activity Approach to Developing Positive Characters*  
Tengku Elmi Azlina Tengku Muda, National University of Malaysia, Malaysia

Gifted and talented students are unique individuals. Therefore, this study has focused on measuring aspects of emotional intelligence, leadership, and personality types, as well as the need for activities to help build positive characters among the students. The study involved a total of 142 gifted and talented students using the IKEM MEQI instrument created by Noriah (2004) to measure emotional intelligence, the Big 5 Personality Instrument by John & Srivastava (1999) to measure personality types, and two aspects of leadership: Leader Attributes created by Rorlinda (2016) and Leader Mindset constructed by ELMI-Norah (2014). The results of the study show that the overall level of emotional intelligence is ranked high (3.912). However, for the components of emotional awareness, empathy, self-control, influencing others, conflict management, and communication, the levels are moderate. The leadership variable in the leader attribute category also shows a high level overall, but the self-monitoring component remains at a moderate level. Furthermore, the leadership variable for the leader's mindset category shows a high level, but the components of recruits, placements, and relationships with peers are at a moderate level. Finally, the personality type variable shows that openness personality is at the highest level. The study's correlation analysis indicates a significant relationship between emotional intelligence and the leadership (attribute) of the leader, emotional intelligence with the (mindset) of the leader, and emotional intelligence with the personality type possessed by gifted and talented students. For the regression analysis, the factors contributing to emotional intelligence are personality extraversion and neuroticism. For the leadership component (leader attributes), the factors contributing to emotional intelligence are ethics, values, and collegiality.

10:55-12:35 | Room 708

# Thursday Onsite Presentation Session 2

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

Session Chair: Shalette Ashman

10:55-11:20

73804 | *From Theory to Practice: A Scientific and Humanistic Investigation of the Geometry Competencies for the Mainstream Deaf and Hard-of-Hearing Classroom*

Vitus Paul De Jesus, Ateneo de Manila University, Philippines

Angela Fatima Guzon, Ateneo de Manila University, Philippines

Despite the calls and efforts of the international agencies/organizations for the creation, promotion and implementation of measures that would assert the right of the deaf and hard-of-hearing (D/HH) learners to access a culture-sensitive education of good quality, numerous foreign and local studies would attest to the prevailing need of an organized form of support services. Recommendations have been made that would benefit including those taught in predominantly hearing classrooms. Among these recommendations is to make the curricula suitable for the mainstreamed D/HH learners. As Luetke-Stahlman (1999) has expressed, the language-challenged learners may require modifications in their learning environment, instruction or activities. The paper presents a method to modify the general mathematics curriculum currently used in Philippine public schools' mainstream D/HH classrooms. Using Tyler's Evaluation Model and Eisner's Connoisseurship Evaluation Model, the whole process combines scientific and humanistic ways of examining how the geometry competencies of Grade 7 mathematics are covered in terms of the five curricular components of learner outcomes, time allocation, learning experiences, learning assessment, and learning materials. From such examination, it is the hope of the researchers to conceptualize a curriculum adaptation model that can serve as a model for developing and modifying curricula in other Mathematics subjects for the community of learners in the D/HH mainstream classroom, and of other mainstreamed learners with special needs. Curriculum developers may opt to adopt it, build on it, or modify it—all for the good of the learners with unique learning contexts.

11:20-11:45

75608 | *Measuring Growth of the Autistic Learner – The Challenges Facing Teachers and Their Practice*

Catriona Fleet, University Technology Sydney, Australia

This abstract presents the outcomes of a two-year collaborative research initiative involving nine specialist schools dedicated to individuals with mild to severe autism. The project aimed to analyse shifts in attitudes towards assessment methods and the use of data collection tools for tracking student progress. Specifically, the investigation centered on changes in attitudes among educators, their participation in targeted professional development sessions, and the subsequent effects on their selection of data collection instruments. Throughout the project's duration, data accumulation occurred through surveys, focus groups, and professional learning opportunities. Initial findings highlighted a lack of awareness among teachers regarding the necessity of employing specific tools tailored to effectively measure the growth of autistic learners. This hesitancy towards adopting specialised assessment tools was primarily attributed to a deficiency in comprehension and training in this specific field. As the research advanced, educators involved in the study engaged in a series of professional learning sessions designed to enhance their grasp of autism-specific assessment techniques. The results displayed a noteworthy positive transformation in teachers' attitudes towards the imperative nature of using specialised tools. However, despite the heightened awareness, the selection of data collection tools did not evolve as anticipated. Remarkably, some pivotal assessment tools designed explicitly to capture the progress of autistic learners were disregarded in favor of instruments aligned with pre-existing curricula. This unexpected preference alteration was attributed to factors such as alignment with curricular materials, familiarity, and convenience.

11:45-12:10

75483 | *The Effect of Computerized Cognitive Training on the Working Memory and Mathematics Achievement of Low Achievers*

Shalette Ashman, LearningHub Group, United States

Computerized cognitive training is widely recognized for enhancing working memory in various populations, such as stroke patients, ADHD children, and older adults. However, its impact on low-achieving primary school students remains under-researched. This study aimed to understand the relationship between working memory, computerized cognitive training, and academic achievement. Specifically, it assessed if this training could boost mathematics scores (using the Grade Four Literacy Test) and working memory capacity (using the Automated Working Memory Assessment) in these students. A randomized control trial was carried out: the experimental group underwent progressive computerized memory training, while the control group received basic training. Both sessions, conducted by the same teacher, lasted an hour daily for five weeks. Post-training, both groups demonstrated enhanced working memory scores. A significant improvement was observed in the experimental group (Wilks Lambda  $F = 2.880$ ,  $p = .045$ ) compared to the control. Although both groups exhibited higher post-training mathematics scores, the difference wasn't statistically significant ( $F = 2.719$ ,  $p = .085$ ). Similarly, the end-of-term mathematics scores six weeks post-training showed improvements for both groups, but the differences remained non-significant ( $F = 2.719$ ,  $p = .085$ ).

12:50-14:05 | Room 708

# Thursday Onsite Presentation Session 3

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

Session Chair: Shawnee McPhail

12:50-13:15

74952 | *The Long-Term Stability of Parent-Child Interaction Quality: A Longitudinal Study of Infants at 6 and 42 Months*

Pei-Chi Kuo, National Tsing Hua University, Taiwan

Yu-Ju Chou, National Tsing Hua University, Taiwan

Background and Purpose: As the primary source of early stimulation and interaction, parenting quality is an influential environmental factor that can alter children's development (Regueiro et al., 2022). Nevertheless, most research on parent-child interaction has focused on either mothers or fathers rather than considering the unique contributions of both parents (Hertz et al., 2019). The purpose of this research is to investigate the long-term stability of parent-child interaction quality and provide a constructive parenting suggestion. Method: The participants of the research were 39 Taiwanese infants and their parents. The parents interacted with their children respectively for 15 minutes when the child was 6- and 42-month-old. The investigators used the Parental Behavior Rating Scale-Revised to measure four aspects of parent-child interaction quality, including Responsiveness, Affection, Achievement orientation, Directiveness (Mahoney, 1999). Result: Two aspects of mother-child interaction quality maintained long-term stability (responsiveness  $r=.55^{**}$ , affection  $r=.49^{**}$ ,  $**p<.01$ ). The result showed that once the maternal parenting styles are perhaps established, the mother-child interaction quality tends to maintain a certain degree of stability over time. On the other hand, the father-child interaction quality didn't maintain stability. Unlike mothers, fathers seemed to adjust their parenting styles or behaviors based on their children's developmental stages or needs. Implication: The findings suggest that mothers should possess positive parenting styles as early as possible, whereas fathers should not only be attentive to the developmental changes in their children, but also adjust their parenting behaviors accordingly to foster a favorable and long-term parent-child interaction quality.

13:15-13:40

75349 | *The Relationship Between Parental Responsiveness and Early Childhood Withdrawal Behavior: The Mediating Role of Emotion Regulation*

Chia-Ying Chen, National Tsing Hua University, Taiwan

Recent studies have indicated that withdrawal behavior in young children is related to their emotional regulation abilities. Supportive parental responses have also been found to contribute to reducing anxiety and decreasing the occurrence of withdrawal behavior. This study examines the link between parental responsiveness and withdrawal behavior in 3-year-old children within the Kids in Taiwan: National Longitudinal Study of Child Development and Care (KIT) ( $n=2157$ ), conducted from March 1, 2016, to May 31, 2017. The selected age range corresponds to the age when the majority of Taiwanese children first enter kindergarten and begin adapting to group life. Withdrawal behavior during this phase has been observed to lead to maladjustment in the new schooling environment. Employing mediation modeling and structural equation analysis, this study scrutinizes potential mediators. Findings reveal a direct negative impact of parental responsiveness on withdrawal behavior, indicating diminished responsiveness heightens withdrawal. Notably, emotional regulation emerges as a vital mediator, exemplified by a robust negative influence on withdrawal behavior; weaker emotional regulation parallels heightened withdrawal. Parental responsiveness positively influences emotional regulation, implying greater parental responsiveness fosters heightened emotional skills. The mediation process elucidates a modest decrease in parental responsiveness coinciding with reduced emotional regulation and heightened withdrawal. Consequently, emotional regulation partially mediates the parental responsiveness-withdrawal association. This model illuminates parental responsiveness's indirect effects on withdrawal, mediated by emotional regulation. Understanding these aspects enhances withdrawal mitigation strategies and offers interventions to foster holistic child development.

13:40-14:05

74778 | *Continued Research of the Experience of Empathy Through Narrative Transportation While Reading LGBTQ+ Texts*

Shawnee McPhail, Capella University, United States

This paper provides further research on a previous study regarding narrative transportation and LGBTQ+ literature. This may help educational psychologists gain insight into the experience of empathy through narrative transportation when their students read literature that is not part of the traditional literary canon; it may also help provide insight about how to use LGBTQ+ literature in a classroom. The purpose of the original study was to explore how learners described their experience reading literature with LGBTQ+ characters and themes, as non-members of the LGBTQ+ community. In this study, non-LGBTQ+ college students described their experiences of reading a novel with LGBTQ+ characters from the formers' perspectives. The target population for this study was cisgender, heterosexual, traditionally-aged college students, defined as 18-35 years of age. Eight participants fully participated in the discussion and were interviewed for the study. The participants were located globally, in a variety of countries. The research methodology was generic qualitative inquiry and data was collected through semi-structured interviews. I used a thematic and inductive analysis. Upon grouping the interview responses, seven themes emerged. After this I taught a different LGBTQ+ text than in the previous study in the form of a print novel to grade 12 students in Japan. I also taught a visual text (a Netflix series) to grade 10 students in Japan. Afterward, students anonymously submitted a reflection survey to collect more data on the use of LGBTQ+ texts in the classroom using similar questions to the original study.

14:20-16:00 | Room 708

# Thursday Onsite Presentation Session 4

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

Session Chair: Daisy Mae Bialba

14:20-14:45

73875 | *Linking Higher Education Pursuit to the Well-Being of Chinese High School Students*

Feng Han, Tsinghua University, China

Xuanyu Chen, Beijing Normal University, China

Mofan Yang, University of Wisconsin-Madison, Wisconsin

Higher education aspirations (the desire to be admitted to the ideal university) have always been the most important goal for high school students from China and other East Asian societies, like Japan and South Korea which are deeply influenced by the Confucian examination culture. Framed by Diener's well-being theory, goal theory and Csikszentmihalyi's flow theory, this study aimed to examine how higher education pursuit affects the well-being of Chinese students. This study employed an explanatory mixed-method approach to collect the empirical data. By convenient sampling and stratified sampling, a sample of 3,810 students aged between 16 and 19 from eight high schools in Jiangsu was surveyed by a validated context-relevant questionnaire instrument. Structural Equation Modeling results indicated that the commitment of higher education goal positively predicted well-being and academic engagement played the mediating role. Additionally, through exam stress, the commitment of higher education goal decreased well-being. Semi-structured individual interviews were subsequently conducted with 27 students and found that Chinese high school students attached great value to higher education pursuit, including the "family-related value", "instrumental value", "growth-related value" and "dream-related value". Their attitude towards higher education pursuit affected their well-being. In conclusion, both positive and negative effects of higher education pursuit on Chinese students' well-being exist, which results from their high value to higher education pursuit. Findings were discussed from the perspective of positive psychology and social culture. The corresponding recommendations are of general value and can be learned by East Asian countries whose cultures have been influenced by Confucianism.

14:45-15:10

74755 | *Bringing Social-emotional Learning into Focus: Insights from Middle Schoolers in India*

Shalaka Shah, FLAME University, India

Shivakumar Jolad, FLAME University, India

Anirudh Prasad, Leadership for Equity (LFE), India

Existing studies on Socio-emotional learning (SEL) and its measurement have highlighted its positive role in school achievements and overall emotional well-being of school children. They have a western perspective thus, restricting its application in the Indian educational context. Addressing this gap, we constructed a tool SEL1.0 to measure SEL for 6th, 7th and 8th graders (N=1852) in government schools in Maharashtra and tool showed acceptable reliability ( $\alpha = 0.69$ ) in the first pilot. After the exploratory factor analysis, five factors of SEL were retained which explained 30.73% of the variance. For the second pilot, these five factors were renamed and a refined tool SEL2.0 was tested again on 6th, 7th and 8th graders (N=3575) in government schools in Maharashtra. We added 10 more items in the 'like skills' domain for SEL2.0 ( $\alpha = 0.75$ ) showing better reliability scores than before ( $\alpha = 0.69$ ). Results reveal overall scores for decision making-self management and emotional development being lowest across the sample; while scores for social awareness followed by academic awareness being highest. Some significant gender differences were found for academic awareness, self awareness, emotional development, decision-making & self management. The study sheds light on SEL status of middle schoolers, indicating improvements in the school environment and reiterating the need for SEL based programs in schools based on a layered analysis. The article ends with pertinent discussion on the existing Indian framework for SEL development and how upskilling teachers to develop SEL in children must be prioritized.

15:10-15:35

73789 | *Comparative Study of Personality Traits Between India and Japan*

Aneesah Nishaat, Soka University, Japan

This study aimed to determine the differences in personality between Indian and Japanese university students. Methodology: The Ten-Item Personality Inventory of Big Five personality traits (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience) was used for survey. Indian students (n = 191; 91 males and 100 females) and Japanese students (n = 248; 131 males and 117 females) participated in the survey. A t-test and analysis of variance (ANOVA) were used to compare the personality traits between the two groups. Results: The t-test results indicated significant differences between Indian and Japanese students. Japanese students scored significantly higher in Neuroticism (t = 7.02; p < .001). Indian students scored significantly higher in the 3 dimensions of Agreeableness (t = 6.16; p < .001), Conscientiousness (t = 9.08; p < .001) and Open to experiences (t = 8.26; p < .001). In the ANOVA test, no significant difference was found between male and female students within each country. Conclusion: In this study, Japan scored lower in three dimensions of Big Five than India (Agreeableness, Conscientiousness, and Openness to Experience). This result was surprising in case of Conscientiousness, as there is well established perception that the Japanese are industrious people. In the case of Agreeableness and Openness to experience, Indian students scored higher which could be attributed to cultural diversity which makes them more accepting of different situations. The result indicates that cultural background might play more important role in shaping personality than gender differences in both countries.

15:35-16:00

75295 | *Moral Distress and Its Relationship to Demographics in Military Nursing*

Daisy Mae Bialba, National University, Philippines

Ronald Reyes, National University, Philippines

Moral distress is a psychological disequilibrium resulting from knowing the ethical action to take but not taking it due to an inhibiting medical power structure or institutional policy. Moral distress is particularly significant in military nursing services wherein a critical care environment such as a battlefield or soldier camp is a highly dynamic patient care environment. The study's main thrust is to determine the level of moral distress and its relationship to the variables of rank, years of service, and area of assignment. A descriptive-correlational study was conducted among 120 randomly selected military nurses from military hospitals. Informed consent was secured, and a moral distress scale questionnaire was validated and utilized after pilot testing. Multivariate regression and statistics were utilized in the analysis. The study showed that the highest level of moral distress is evident in the first five years of military nursing, with the lowest level during the 21st-25th year of service. In terms of rank, the highest moral distress can be observed from the 2nd lieutenants, with the 1st class colonel experiencing the lowest level of moral distress. Lastly, those assigned to Mindanao, the southern main island of the Philippines, experienced the highest level of moral distress, while those on the central island of Visayas had the lowest level. The result of the work suggests the need for revising institutional constraints on autonomy and cultural differences, training for personal and professional growth, as well as orientation programs for sensitivity and ethical climate to address problems of moral distress.

16:15-17:55 | Room 708

# Thursday Onsite Presentation Session 5

Higher Education

**Session Chair: Yunreun Kwag**

**16:15-16:40**

73771 | *The Influence of Self-Concept on Interest in Becoming a Teacher in Students of the Mathematics Education Study Program in Indonesia*

Tanti Listiani, Universitas Pelita Harapan, Indonesia

This study aims to determine the influence of self-concept on interest in becoming a student teacher in the Mathematics Education study program at a private university in Indonesia. The method used in this study is a survey method with a descriptive-quantitative approach. The sample used in this study was made up of students of the Mathematics Education study program Class of 2021, with a total of 16 students. Data collection techniques using questionnaires. Test instrument validity using Product moment correlation, and reliability test using Alpha Cronbach's with a total of 16 students. The prerequisite test of analysis consists of a normality test and a homogeneity test. Test the hypothesis of this study using simple linear regression. The results showed that self-concept had a moderate influence on interest in becoming a teacher with results of 48.1% and 51.9% influenced by other factors, consisting of internal factors such as individual personality factors and external factors such as parental factors, peer factors, gender factors, cost factors, and employment factors. Student self-concept affects students' interest in becoming teachers, for that students need to be given direction and understanding of the importance of good self-concept, especially as holistic educators.

**16:40-17:05**

75919 | *Pursuing a Career in Logistics: Study Choice Motives and Career Expectations*

Sandra Eitler, University of Applied Sciences BFI Vienna, Austria

Reinhold Schodl, University of Applied Sciences BFI Vienna, Austria

Major trends, such as digitalization, automation, and sustainability, will shape the future of the logistics industry. As a result, qualifications required in the professional field will change, but demand for logistics professionals with a university degree will also increase. Study choice motives are not only fundamental to whether someone completes an education and later works in the sector but also influence the development of professional competences and hence professional success. Following general motivation theories, study choice motives can be divided into intrinsic, extrinsic, and altruistic motives. However, it is not individual motives that are crucial for the decision to study a particular degree programme but the interplay of several motives. Because there is only sparse research on logistics students' study choice motives and students at universities of applied sciences (UAS) who are assigned different study choice motives than students at universities, the objectives of this paper are twofold: to explore the study choice motives and career expectations of logistics students at the UAS BFI Vienna and to propose measures for the logistics industry, tertiary institutions, and politics to encourage more young people to pursue a career in logistics. For the online survey, a questionnaire based on existing instruments was compiled and adapted to the study subject. Findings suggest that understanding motives for pursuing a career in logistics is a multidimensional problem requiring taking a wide range of motives into account. In conclusion, the motives identified in this study provide valuable starting points for designing measures to arouse interest in logistics.

**17:05-17:30**

76022 | *Examining the Relationship Between Graduate Students' Moral Education and Occupational Choice*

Caroline Wang, Beijing Technology and Business University, China

Graduate supervisors are the first responsible person for graduate cultivation, which means they are responsible for both academic supervision and moral education. While graduate supervisors who are connected to business and industry are better qualified to advise students on their career choices than academic advisors, However, there is limited research on how their moral education guidance and influence is related to students' career choices during the educational process. The purpose of this study is to better understand the moral-educational guidance of supervisors in relation to graduate students' choice of work location, job category, and industry income. We analyzed longitudinal data on 438 Beijing Institute of Business and Technology graduate work students, and obtained performance questionnaires on moral education and Work & Well-being Survey. A linear regression model by Statistical Product Service Solutions showed that students who receive frequent, smooth and effective contact with their supervisors are more likely to take their career advice. The tutor's honesty, respect, and genuine interest in the student's needs and desires enables the students intuitively find their own career path. Notably, there is a positive, statistically significant relationship between mentor advice on career ethics and the student's career options. Our research also shows that students who have received a good moral education are more likely to be self-motivated and overcome difficulties at work, regardless of work location or salary.

**17:30-17:55**

73192 | *Crafting My Identity as a Journal Editor: Early Career Researchers' Learning of Academic Literacy and Socialization*

Yunreun Kwag, Seoul National University, South Korea

Jinhee Choi, aSSIST University, South Korea

Although academic literacy development is critical for fostering next generation researchers, how early career researchers learn academic literacy and socialize in the scholarly community is underexplored. Academic literacy development and socialization is a complex, socially situated, and multifaceted process which requires understanding of international and domestic discourse of academic community and practice, language learning, and power. The purpose of this study is to explore the nature of academic literacy development and socialization among early career researchers in higher education. We draw our experiences in offering services to the academy community by managing, interacting, and coordinating with academic society. In our interactions with authors, reviewers, assistants, publishers, and other editors, we facilitate our learning of tacit knowledge and expertise, academy literacies (e.g., disciplinary based literacy and sociocultural literacy), power and authority. We contribute to the literature on academic socialization of postdoctoral researchers in non-formal learning.

18:10-19:25 | Room 708

# Thursday Onsite Presentation Session 6

Nurturing Creativity & Innovation: New, Innovative & Radical Education

Session Chair: Nor Fadzleen binti Sa don

18:10-18:35

75944 | *Action Research on the Situations and the Integration of Scientific Inquiry Courses into SDGs Issue*  
Xin Yi Chang, National Pingtung University (NPTU), Taiwan

In 2015, the United Nations announced the "2030 Sustainable Development Goals" (SDGs). The SDGs contain 17 core goals that guide the world to work together towards sustainability. The purpose of this research was to investigate the current status of the integration of scientific inquiry experimental courses into SDGs. The vision of high-quality education that UNESCO hoped to achieve between 2015 and 2030 coincides with the core literacy concept of my country's 12-year national basic education. Through literature research and analysis, this study took 18 students from Chaozhou Senior High School in Pingtung County as the research object in the flexible curriculum of scientific inquiry experiment, collected the local characteristics and sustainable development education related materials that the rural schools were concerned about for research, and integrated the questionnaires. Survey results and information. This paper proposed the images and trends of sustainable science popularization in Pingtung County, and applied them to the issues and challenged of sustainable education, as a reference guideline for formulating strategies for improving the quality of education in Pingtung County remote area high school and the model for sustainable development of education especially for awareness energy resources. In this way, the goal of sustainable development was combined with the natural science curriculum of high school in rural areas, and the four major aspect of new scientific knowledge are physics, chemistry, mathematics, and dissemination to existing issues to discuss, practice, and act, and can be used by researchers in other organizational backgrounds. Further verification and reinforcement.

18:35-19:00

73650 | *Micro-Credentials in Social Impact Entrepreneurship Education: An Action Learning Approach*

Vera Betz, Catholic University of Eichstätt Ingolstadt, Germany  
Eva Wack, Catholic University Eichstätt Ingolstadt, Germany  
André Habisch, Catholic University Eichstätt Ingolstadt, Germany  
Martin Heinberg, Leeds University Business School, United Kingdom  
Stefan Wilhelm, Independent Scholar, Germany

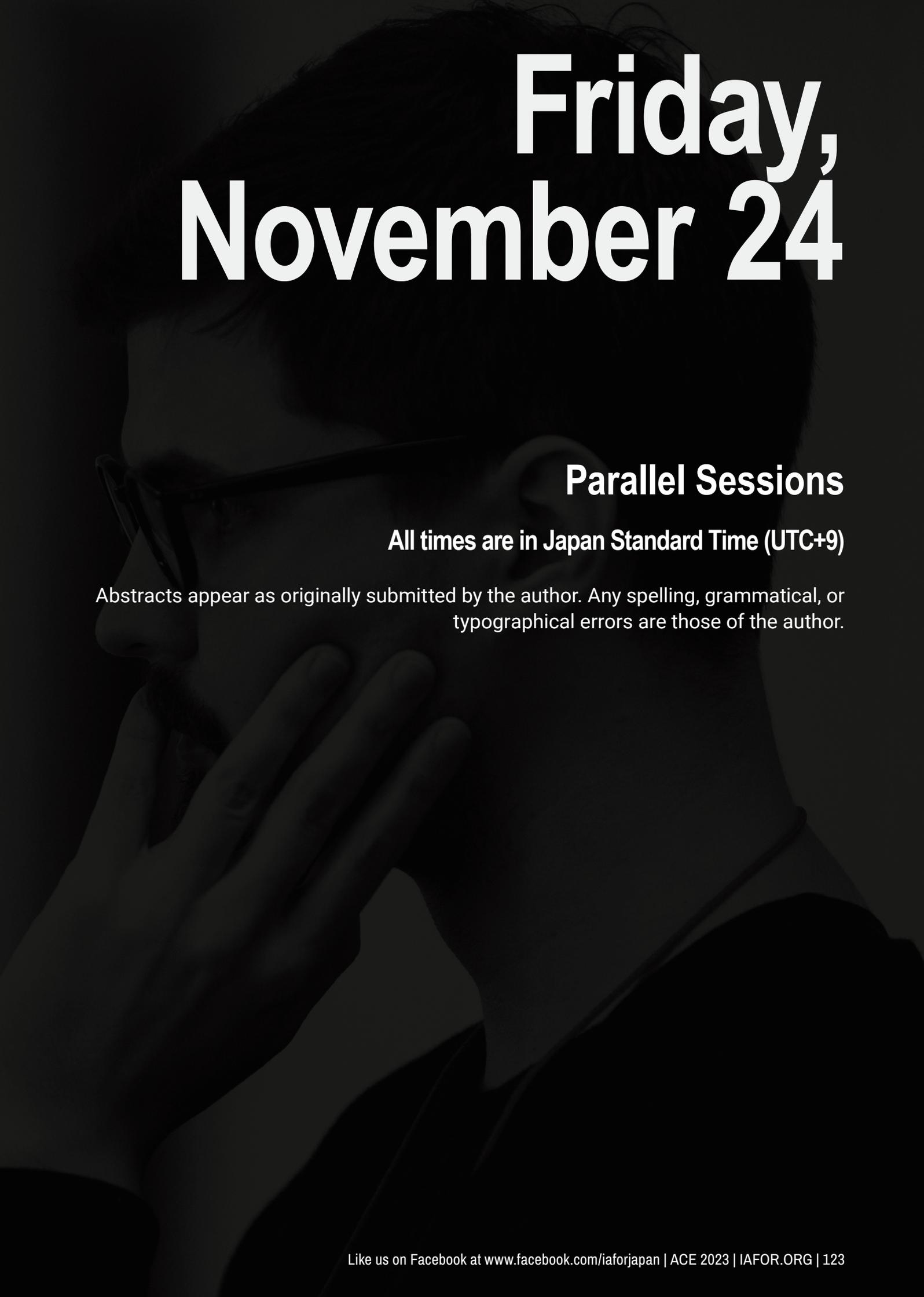
Due to the increased frequency of radical changes and new developments in society and the work environment, there is a rising demand for upskilling, reskilling, and reshaping job profiles. Micro-credentials are an aspiring new option to meet those constantly evolving requirements and foster employability with the potential to disrupt the higher education landscape. Additionally, higher education institutions strive to equip their students with needed transversal competencies, so-called soft skills. The Social Impact Start-Up Academy (SISTAC) applies an action learning format for students and entrepreneurs to teach social innovation in real cases and empower social impact start-ups from developing countries. We developed a comprehensive set of questionnaire items to evaluate the transversal competencies of students who participated in a SISTAC approach in social entrepreneurship education. The participants in this first part of the study are 40 master's students in business administration from a local university in southern Germany. The treatment group attended an action-learning class, while the control group did not participate in any social entrepreneurship course. We already conducted the pre-treatment measurement, post-treatment follows in summer 2023, and we expect the first results from this research in fall 2023. The results shall provide evidence of how an innovative action-learning approach fosters transversal competencies in entrepreneurship education and how these can be aggregated into micro-credentials. We also expect the set of questionnaire items to measure transversal competencies for empirical research in sustainable business education to be useful for several educational contexts, especially for enabling and assessing novel creative educational approaches.

19:00-19:25

73949 | *MetaClass: Success Factors for Optimizing the Metaverse Environment in Teachers' Continuous Professional Development in Malaysia*

Nor Fadzleen binti Sa don, English Language Teaching Centre, Ministry of Education Malaysia, Malaysia

The Metaverse, a virtual reality environment consisting of interconnected digital spaces, is gaining traction as an innovative and immersive learning experience in lifelong learning. In the context of teachers' continuous professional development (CPD), Metaverse is still a novel concept which has huge potentials for enhancing teachers' professionalism in the digital age. This paper studies the impacts of the Metaverse on teachers' CPD via MetaClass, an immersive 3-D learning space in a virtual realm. It is created via Spatial.io, an immersive shared AR platform which integrates realistic simulations, collaborative activities, and experiential learning modules. Drawing upon the constructivist learning theory, this study aims to see how MetaClass which offers immersive features integrates the principles of experiential and innovative learning in enhancing professional development. It encourages teachers to explore, experiment, and reflect on their teaching practices, fostering a deeper understanding of pedagogical concepts and instructional strategies. Through cognitive search, this study aims to investigate how teachers in Malaysia can effectively navigate and retrieve relevant educational resources within the Metaverse. By employing user experience (UX) testing, the researchers will evaluate the usability, intuitiveness, and overall user satisfaction of the Metaverse as a CPD tool. Insights from the cognitive search and UX testing will lead to identifying success factors in optimising the Metaverse environment for teachers' continuous professional development. The findings of this study will contribute to the growing body of research on the integration of immersive technologies for innovative CPD in Malaysia and beyond.



# Friday, November 24

## Parallel Sessions

All times are in 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 603

# Friday Onsite Presentation Session 1

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

Session Chair: Lindsay Mack

09:00-09:25

74897 | *Incorporating Media Literacy into Foreign Language Classrooms to Advance Kazakh Students' Critical Communication Skills*

Perizat Yelubayeva, Al-Farabi Kazakh National University, Kazakhstan

Sholpan Kudyarova, Al-Farabi Kazakh National University, Kazakhstan

This paper examined the impact of incorporating media literacy practices into foreign language instruction. The study focused on improving students' critical communication skills by increasing their awareness of media content and ability to recognise, resist, and respond to fake news and disinformation. The paper determined a practical pedagogical approach for guiding a language learner to become a critical thinker and effective communicator in a media-saturated world. By integrating media literacy into classrooms, educators critically engage students with various media forms, develop discerning communication skills, and become responsible and informed digital citizens. This paper presents the Communication and Media Literacy model as a teaching framework that guides the designing and implementing effective teaching strategies for contextual learning of the real world. The study results showed that the suggested approach created an educational environment that encourages the application of concepts to address real-world issues by analysing information, comprehending new ideas, solving problems, and making decisions. Students showed significant improvements in reading and interpreting technical texts, viewing media critically, understanding and examining sources of information, and communicating their opinions and ideas using various multimedia tools. It concludes with practical recommendations for FL educators implementing media literacy instruction to enhance students' critical communication skills.

09:25-09:50

72606 | *Attitudes of Students Towards Lessons Using Video Materials*

Batjantsan Khishigdelger, National University of Mongolia, Mongolia

This paper examines the attitudes of students towards lessons using video materials in the context of teaching the Japanese language to foreign students. Previous teaching methods in the field have shifted from grammar lectures to communication-based student-centered learning approaches. Consequently, the use of video content has gained popularity due to its effectiveness in enhancing learning outcomes and providing real-life examples difficult to express in a foreign language. In this research study, a survey was conducted on 56 Mongolian university students learning Japanese to assess the importance of video lessons in Japanese language classes and gather students' feedback on their experiences with video-based teaching. 96.4% of students believed that video lessons were necessary, indicating a strong interest and enthusiasm for incorporating video content into their learning experience. To find the motivational factors that motivate students, a factor search was conducted on 20 questions of motivation to learn Japanese, and based on these questions: Factor I-identified regulation, Factor II-intrinsic motivation, and Factor III- external regulation. The survey results suggest that the use of video materials in Japanese language lessons can be highly effective. Students expressed a preference for video-based teaching, highlighting its potential to enhance motivation and create a real learning experience. Additionally, students who attended lessons using video materials reported higher satisfaction levels. Therefore, incorporating video materials into the classroom can be an effective approach for improving students' attitudes and learning outcomes in foreign language education.

09:50-10:15

71581 | *Current Utilization of Video-Based Flipped Classroom in EFL Students' Learning Outcome: A Meta-Analysis*

Shofie Nurul Azizah, State University of Yogyakarta, Indonesia

Jamilah Jamilah, Yogyakarta State University, Indonesia

Umi Farisiyah, Graduate School of Yogyakarta State University, Indonesia

The online flipped classroom is one of the teaching methods that has effectively integrated traditional education and social networks using both environments inside and outside the classroom. The present study aims to evaluate the impact of using the video-based flipped classroom on EFL students' outcome of their English Language learning. A quantitative study using a meta-analysis design is employed. Data were collected from two databases from 2019 – 2023. 41 studies and 988 students were included in this meta-analysis study. The selected studies have criteria that contain standard deviation and means of English learning outcome. Other variable moderators: subject, object, duration, context, tool, and interaction, are also included to enrich the data. As a result, it is found that the video-based flipped classroom will be more significant in affecting English learning achievement if it is implemented in a medium-sized sample (21-40); video-based flipped classrooms significantly improve English learning achievement (effect size = 0.552) in both productive and receptive skills. Testing other variables' influence on the success includes moderate effects from medium-length videos, web-based/social media as a tool, and YouTube as a video learning resource. The flipped classroom is appropriate for teaching secondary, high, and university students in the English learning process. More theoretical and practical implications of Video-based FC supporting the student's English achievement will be explored.

10:15-10:40

73799 | *Prevent or Integrate: Machine Translation Usage in the EFL Classroom*

Lindsay Mack, Ritsumeikan Asia Pacific University, Japan

This session will detail the results of a pilot study investigating English as a foreign Language (EFL) student machine translation (MT) usage at an international University in Japan. This pilot study is part of a larger two-year grant-in-aid (a competitive research grant given by the Japanese government) mixed method investigation to better understand the effects MT integration curriculum has on students' writing and MT usage throughout their college career. First, the presenter will give background information about the current research trends for dealing with machine translation. Although MT research has increased recently, it is still an emerging topic from the last 10 years and conclusive results leading to recommendations and best practices for MT classroom integration do not exist. Next, the presenter will explain her two-year research plan and the connection with the pilot study. The pilot study will be conducted to trial material and investigate the prevalence of MT usage. The presenter will report on the results of the study and make recommendations for how to best teach ethical machine translation use in a university setting. The results will deepen the theoretical and practical knowledge related to academic integrity considering the new advent of highly proficient MT applications and elucidate the possibility of a more constructive approach to the issue of MT use in foreign language education and in higher education in general.

10:55-12:35 | Room 603

# Friday Onsite Presentation Session 2

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

Session Chair: Hiroshi Hasegawa

10:55-11:20

75111 | *Students' Responses on Using Interactive E-Module Based on Multimodal Text as a Self-Study Learning Resource for an English Structure Course*

Afrianto Daud, Universitas Riau, Indonesia

This study aimed to see how English students at one university in Indonesia responded on the use of an interactive e-module based on multimodal text as a self-study learning resource for an English Structure course. This e-module was developed in supporting digital-based learning at Universitas Riau, Indonesia. The research followed a systematic Research and Development (R&D) approach and applied the ADDIE model, which encompasses five stages: analyze, design, develop, implement, and evaluate. The e-module was designed to include animated videos and interactive quizzes integrated into a Flipbook maker application. It comprised six chapters, each comprising several sections: video explanations, text descriptions, examples, interactive quizzes, and chapter summaries. After the e-module was assessed as a valid learning medium by both media and content experts, the e-module was piloted to a group of students at Universitas Riau. Their feedback demonstrated a very positive response, with the e-module receiving high ratings for its attractiveness (3.80) and convenience (3.90) aspects. Thus, it can be inferred that the e-module exhibits excellent quality, encompassing both content and media elements, rendering it a well-suited digital learning resource for the Intermediate Structure course within the English Department at Universitas Riau, Indonesia.

11:20-11:45

73935 | *Using Technology to Teach English Communication for Repeaters*

Gota Hayashi, Tokyo Keizai University, Japan

Eight students (n=8) attending a required course called English Communication at one university in Japan were taught during fall AY2020 (i.e., from September 2020) after the instructor reviewed literature from January 2017 to August 2020 on teaching EFL learners who are repeating their courses. When class began in September, the instructor started teaching 15 sessions on Zoom with each session consisting of two 90-minute sessions on Zoom, and took notes after class based on class observation after each session. Based on a synthesis of literature review and notes based on observation, it became evident that (1) a semester-long twice a week 90-minute course based on having students make answers based on open-ended questions can elicit increasingly complex responses from students whose TOEIC scores range from 295 to 345 points in the target language; and (2) having students submit reflections at the end of each class can enable teachers to understand difficulties students are facing with developing their linguistic skills and encourage students to reflect on themselves for personal development. Details of literature review, open-ended questions, and notes based on observation will be presented to help the audience think about ideas that can be applied to their own classes.

11:45-12:10

74814 | *Narratives from Novice Tutors in Foreign Language Education: Digitally Oriented Teaching Environment*

Hiroshi Hasegawa, Curtin University, Australia

The response to the COVID pandemic induced the rise of online learning/teaching, relying heavily on digital technologies. To date, online teaching approaches are well-accepted in most subjects, except foreign language education. Among various foreign languages, scripted languages such as Japanese require its teachers to be equipped with unique teaching skills and approaches which are distinctive from non-scripted languages. In addition, fully digitally oriented teaching environments are observed more commonly in higher education institutions in Australia than ever, and research on its teaching mode is of prime importance. The purpose of this study is to analyze the experiences of tutors in online-learning contexts (1) to ascertain difficulties caused by unforeseen situations in online settings, (2) how tutors reflect on those obstacles, and (3) the impact on subsequent lessons for the rest of the semester. The tutors interviewed were experienced with face-to-face teaching but were unfamiliar with online teaching approaches. Thematic analysis was used as the primary research method, with semi-structured interviews conducted throughout 2023. Lessons, lesson plans, and, when necessary, lesson recordings were reviewed, and potential pitfalls were raised during interviews, giving tutors opportunities to respond. This research may provide vital and urgent suggestions for future tutors who may find themselves in environments where digitally oriented foreign language approaches will be demanded further.

12:10-12:35

73569 | *The Effectiveness of Online Teaching Activities: A Case at UFLS – UD, Vietnam*

Oanh Tran Thi Thuy, University of Foreign Language Studies, Vietnam

Universities have been very interested in implementing online teaching activities, which is the optimal choice in a modern society. University of Foreign Language Studies (UFLS) belonging to the University of Danang (UD, Viet Nam) have focused on implementing this activity in many recent years through a variety of work such as investing in information technology infrastructure and software, organizing training courses for teachers to use them, encouraging teachers in being conscious of implementing online teaching, spending time to invest in drafting lectures, applying teaching methods suitable to the online teaching model in order to integrate maximize the learning activities of learners. However, all these things have not really met the demand at all for bringing the effectiveness of online teaching due to a lot of reasons. There were still cases where teachers have not mastered online teaching equipment, especially supporting software as well as responding to students' questions about lessons in the teaching process. The paper used qualitative and quantitative as well as surveying methods with 20 teachers and 200 students of UFLS-UD to find out the current situations and proposed appropriate and feasible solutions to improve the activities of online teaching to ensure the quality of high education at UFLS – UD, Viet Nam in personal and universities in general.

12:50-14:30 | Room 603

# Friday Onsite Presentation Session 3

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

Session Chair: Nian Liu

12:50-13:15

74560 | *The Effects of Virtual Agents on Bilingual Teachers' Willingness to Communicate in L2*  
Tzu-Yu Tai, Providence University, Taiwan

Developing adequate speaking skills in a second and foreign language (L2) has been challenging and anxiety-provoking. With the advancement of artificial intelligence and automatic speech recognition, some researchers have suggested that the pedagogical use of virtual agents can effectively promote learners' willingness to communicate in L2. However, virtual agent-assisted bilingual teaching has yet to be a fully-fledged field of research. Therefore, the study investigated the effects of virtual agents on Taiwanese bilingual teachers' willingness to communicate in English and their perception of virtual agents for bilingual teaching. A total of 30 Taiwanese bilingual teachers were recruited and participated in a one-semester intervention consisting of interactive activities with the virtual agent Google Assistant on Google Nest Hub in their daily life and bilingual classrooms. The quantitative (WTC questionnaires) and qualitative data (semi-structured interviews) were collected and analyzed. The results indicated that the virtual agent significantly promoted the participants' L2 WTC. Detailed analysis of the interview data revealed that the participants enjoyed interacting with the virtual agent because it created a less stressful, friendly interactive environment. The mobility, convenience, and various modes of interaction engaged the participants and reduced their anxiety. More importantly, virtual agents provided opportunities to practice speaking with immediate feedback, all conducive to improving bilingual teachers' L2 WTC.

13:15-13:40

73596 | *A Contrastive Study Between Aboriginal Languages and Chinese: From the Writing Systems to the Second Language Teaching in Australian Curriculum*  
Diana Po Lan Sham, Hong Kong Chinese Institute of Engineers, Hong Kong

In Australia, both Aboriginal languages and Chinese are the oldest but still alive languages taught as first and second languages in Australian Curriculum. Although the Aboriginal and Torres Strait Islander People are supposed to be the "First Nation" in Australia, in fact, their languages are spoken dialects and languages without their own writing system. In the late 1830s, when the Bible was first translated into Aboriginal language through Latin symbols, the Aboriginal writing system was established. Basically, the existing Aboriginal writing system is only the English orthography based upon 26 alphabets and 3 vowels transcribing the sound of the Aboriginal languages without meaning. The major concerns of learning Aboriginal languages as a second language are to better understand local Aboriginal languages and culture as well as why it plays a big part in their lives in the country. In contrast, Chinese is a writing system of complete logographs consisting of a huge amount of pictograms. Most of the non-Chinese speaking students from kindergarten to L12 prefer to study Chinese mainly due to the fact that China is supposed to be the second largest economy in the world aiming at economic exploration and the huge market owing to the population of 14 billion. However, when they learn Chinese-as-a-second-language, they find out that it is "too foreign" and "too difficult" as the hardest language to learn in the world. This paper investigates the writing systems and as-a-second-language education of Aboriginal Languages and Chinese in Australian Curriculum from a contrastive approach.

13:40-14:05

75657 | *Teaching English and Global Citizenship Through the Creative Arts*  
Nathan Meyer, University of Utah Asia Campus, South Korea

Teaching English through the creative arts is not only a proven pedagogical approach to reinforce language skills, but also an impactful strategy to foster multicultural awareness, global mindedness, and inspire lifelong learning. In this presentation, we will survey a dynamic selection of successful English language creative arts projects ranging from classroom assignments to multinational collaborations and large-scale public events involving hundreds of participants from numerous countries. These scalable examples show how English teachers of all levels can use creative writing, visual arts, multimedia projects, and everyday technology to build students' language skills and meet learning objectives through student-centered instruction and project-based learning. Additionally, it shows how these English language creative arts projects develop a wide range of transferable skills and critical thinking tools which students can apply to their future academic and professional lives.

14:05-14:30

73108 | *Integrating Chinese Calligraphy in Language Education: Enhancing Proficiency and Cultural Understanding*  
Nian Liu, University of Oklahoma, United States

This abstract explores the integration of Chinese calligraphy in language education as a means to promote proficiency in Chinese and deepen cultural understanding. By incorporating calligraphy into language curricula, learners engage in a multi-sensory experience that enhances character recognition, stroke order, and overall language learning. The study highlights the appreciation of Chinese characters facilitated by calligraphy, allowing learners to explore the historical evolution and artistic variations of characters. This fosters a sensitivity to the aesthetics and cultural nuances embedded within the language. Cultural immersion is emphasized as calligraphy provides a gateway to Chinese traditions, values, and philosophies. Through practice, learners establish a profound connection to Chinese history, art, and philosophy, enhancing their ability to communicate effectively and respectfully in Chinese language contexts. Furthermore, calligraphy strengthens language proficiency by focusing on strokes, radicals, and character composition. This leads to improved reading, writing, and accurate character reproduction. Handwriting skills are enhanced, contributing to overall language mastery. Expressive language skills are cultivated through the exploration of different calligraphy styles, allowing learners to develop their own artistic voice and creative expression in written and spoken Chinese. In conclusion, integrating Chinese calligraphy into language education offers a holistic and enriching learning experience. By combining visual and kinesthetic learning, character appreciation, cultural immersion, language proficiency development, and expressive skills cultivation, calligraphy promotes proficiency in Chinese and deepens cultural understanding among learners.

14:45-16:00 | Room 603

# Friday Onsite Presentation Session 4

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

Session Chair: Virginia Tze

14:45-15:10

73872 | *Manage Boredom Through Situation Modification Strategies*

Virginia Tze, University of Manitoba, Canada

Johnson Li, University of Manitoba, Canada

Stephanie Brekelmans, University of Manitoba, Canada

Lia Daniels, University of Alberta, Canada

When students are bored, they typically resort to avoidance strategies, such as taking their cell phone out to get an immediate relief. There is no doubt that the short-term relief has a longer-term negative impact on students' learning (Tze et al., 2016). While the literature on boredom has grown substantially, little is known about what a boredom intervention should entail. This study was dually based on Gross's emotion regulation model (2015) and Pekrun's control-value theory (2006). Given that there might not have much liberty to choose which course to take (e.g., mandatory courses in a program) or propose changes in topics covered in a course, situation modification—how students can modify their immediate physical learning situation—is considered a pertinent emotion regulation for students to combat boredom. An animated intervention video featuring what students can do prior to, during, and after a boring class was developed. Individual interviews were conducted with ten university students on the intervention materials. Participants found that videos were engaging and provided helpful content. While narration is supposed to provide information through an additional auditory channel, most participants (70%) preferred the animated video without narration, suggesting a single modality of information delivery might be sufficient when delivering the intervention. Another possible explanation could be that situation modification skills are complex and thus, to fully comprehend it, video including relatively more texts indeed facilitate such comprehension. The qualitative data provide some support regarding the usefulness of teaching students tangible steps and skills to reduce their boredom.

15:10-15:35

73356 | *The Effects of Working Memory Interventions on Enhancing Phonological Awareness Skills among Adolescents with MID (with/without co-morbidities of ASD)*

Siti Nadiyah Arman, Curtin University, Singapore

Working memory (WM) plays a pivotal role in learning, and contributes towards the development of cognitive functioning. Students with Mild Intellectual Disability (MID), with and without co-morbidities of Autism Spectrum Disorder (ASD) face significantly higher challenges when assessed on the components of WM compared to students with typical development of similar chronological age. The lower retention of learnings of students with developmental conditions, underpin the interest of using WM interventions to improve their WM and related neuropsychological abilities. This pilot study investigated a short and engaging adaptive WM intervention that targeted executive skills and aimed to improve students' phonological and WM abilities. The study employed a single group pre-post, no-control design. Nine students aged between 13 to 14-years were shortlisted and allocated into two training intervention groups (n = 4, n = 5). They attended a 14-session WM group held once weekly for an hour. Students practiced their WM to enhance retention of taught knowledge through engagement of adaptive WM interventions (e.g., listening and recall, odd-one out). Students in both intervention group demonstrated improved processing speed, mental effort and control of attention. Their abilities to perform phonological awareness activities and recall non-decodable sight words (e.g., what, that) also advanced. This program displayed the potential to improve adolescents' WM and phonological skills. Implications of this study may contribute to the future use of WM interventions in class settings to promote learning. Inclusion of control group and larger sample size are needed for future studies.

15:35-16:00

73873 | *Evaluating the Effectiveness of a Boredom Intervention*

Virginia Tze, University of Manitoba, Canada

Johnson Li, University of Manitoba, Canada

Lia Daniels, University of Alberta, Canada

Boredom is undoubtedly a common emotional experience among students. Tze et al. (2016) has identified its negative impact on students' learning. While more research has generated to investigate what the teachers can do to mitigate boredom, as far as we know, there has not been an investigation undertaken to support the individuals—students—who experience this negative emotion. In this study, we designed a two-session boredom intervention. The first session focuses on psychoeducation, which teaches students about what boredom is as a scholarly construct; and the second session incorporates cognitive restructuring principle to walk students through six simple steps to debunk boredom thought errors. Both sessions included animated videos and online learning games. To evaluate the effectiveness of this program, a comparable intervention was created which include a session on explaining what university is and another session on scheduling for post-secondary study. Canadian university students were recruited, with n = 578 for boredom intervention and n = 256 for the comparable intervention. Prior to the intervention, students completed a pre-intervention survey, and immediately after watching the animated video and completing learning games, they filled out a post-intervention survey. Our results showed that, after controlling for the initial difference on boredom, students partaking the boredom intervention reported significantly lower level of boredom compared to those participating in the comparable intervention. Furthermore, their knowledge on boredom and cognitive restructuring skills both increased when compared to those receiving comparable intervention. Our study thus provides solid evidence regarding the effectiveness of the boredom intervention.

09:00-10:40 | Room 604

# Friday Onsite Presentation Session 1

Higher Education

Session Chair: Jayson Barlan

09:00-09:25

73259 | *Hong Kong Undergraduates' Strategy Use in Academic Vocabulary Learning: A Mixed-Methods Study*  
Edsoulla Chung, Hong Kong Metropolitan University, Hong Kong

Knowledge of core academic vocabulary is crucial for achieving success in higher education. Despite its importance, however, this type of vocabulary is not typically taught in subject area courses at university. Therefore, it becomes the responsibility of college students to take the initiative and adopt different strategies to learn new academic-oriented words. Although many researchers have investigated the vocabulary learning strategies used by university learners of English, very few studies have focused on the specific strategies they employ for learning academic vocabulary or how the students' choice of strategy is related to their proficiency level and academic discipline. Accordingly, this presentation reports on a mixed-methods study investigating the strategies adopted for academic vocabulary learning by 172 first-year undergraduates at a Hong Kong university based on responses to a questionnaire and in-depth semi-structured interviews with 22 students. Findings revealed that the student participants preferred using oral repetition, dictionaries, guessing at unfamiliar words, and metacognitive and note-taking strategies. However, they rarely set goals, used wordlists or adopted other strategies for learning academic vocabulary. Further, their choice of strategy appeared to be related to their proficiency level, academic discipline, language learning experience, and beliefs about academic vocabulary learning. Pedagogical implications and directions for future research are discussed.

09:25-09:50

73710 | *Using a Corpus-Based Approach to Explore Writing Variation in Engineering Subdisciplines: Pedagogical Implications*  
Li Lian Khaw, Monash University, Australia

In the contemporary academic culture where publications are highly valued, Engineering graduate research students are generally expected to publish their research outcomes during their doctoral candidature. Writing for publication can be challenging if one is not aware of the writing conventions in a subdiscipline. Technical text books have been found inadequate in providing writing advice to novice writers who intend to write in Engineering subdisciplines, and some scholars have suggested engaging students with authentic language data relevant to the field, thus helping them better understand language conventions in their discipline. The present study aims to explore writing variation on the use of the first-person pronoun with an active verb and the use of passive construction, and their rhetorical functions in writing journal abstracts, across eight Engineering subdisciplines with AntConc, a corpus analysis tool. A main corpus of 480 abstracts from 8 Engineering sub-disciplines was compiled and divided into 8 mini corpora, each with 60 best paper abstracts from the top 5 journals in the field. AntConc was used to explore and analyse the corpus. The rhetorical functions of the target linguistic items were further analysed. The findings revealed that there were significant variations across these Engineering subdisciplines in terms of usage frequency and rhetorical functions. To train Engineering graduate research students in research writing, awareness in sub-disciplinary writing variation should be raised, and language analysis tools can be introduced for the students to further train themselves to be writers in their respective sub-disciplines.

09:50-10:15

75896 | *Enhancing Students' International Competitiveness in Taiwan through Engagement in English-Medium Instruction: An Investigative Study*

Joying Chu, National Tsing Hua University, Taiwan  
Tsai Chueh-He, National Tsing Hua University, Taiwan

In Asia, English-Medium Instruction (EMI) courses have become a fairly important phenomenon in the creating internationalized learning environments in higher education institutions (HEIs). The purpose of this study was to investigate which factors influence students' participation in EMI courses and whether the participation in EMI courses increases students' international competitiveness. This paper is an evidence-based study of 4,090 graduates from 2016 to 2021 in Taiwan University. The methodology of this study utilizes regression analysis as a statistical method. The results of this study showed that, firstly, English proficiency and international exchange (foreign language country) had a significant positive effect on the number of credits taken in the EMI courses, which means that better English proficiency or exchange experience in a foreign language country is an important key variable for students to take up the EMI courses. Second, foreign language proficiency, international perspective, and intercultural experience were found to be dependent variables of international competitiveness. And it was found that family income, EMI grades, and international exchange all had a positive and significant effect. The proportion of EMI credits and international volunteers have a significant positive effect on foreign language proficiency and international perspective. It also shows that students' international competitiveness is indeed enhanced by taking more EMI courses, having higher EMI scores and participating in international exchange activities in foreign-language countries. The results of this study will provide insights into how EMI can create a sustainable learning environment in non-English speaking countries.

10:15-10:40

74815 | *Challenges, Compliance, and Effectiveness of Philippine Quality Award Program Among Level 1 Recipients: Basis for Continuous Improvement Plan*

Jayson Barlan, Lyceum of the Philippines University Manila, Philippines

This study determined the challenges, compliance, and effectiveness of the Philippine Quality Award Program among level-one recipients. A total of 150 senior leaders from private and public Higher Education Institutions (HEIs) who were Level 1 recipients from 2005 to 2021 were included in this study. Findings revealed that respondents encountered some challenges in Categories 3.1 - Voice of the Customer, 7.5 - Budgetary, Financial, and Market Results, and 5.2 - Workforce Engagement and with a high level of compliance with Categories 2.1 - Strategy Development; 1.2 - Governance and Societal Responsibility; 3.2 - Customer Engagement. Respondents recognized further the effectiveness of the Quality Management System in managing the school, promoting the school climate, and cultivating external relationships. A significant difference exists among variables when respondents are grouped by firmographic profile. Institution type showed significant differences in governance, societal responsibility, and leadership results, particularly for institutions operating for 40 years and below. Colleges had higher compliance than universities. Regulated institutions faced more challenges. Public institutions operating less than 40 years, colleges and regulated institutions showed higher compliance with PQA requirements. Public institutions assessed QMS effectiveness more positively than other profiles. A highly significant relationship exists among the three variables. This implies that lesser challenges lead to greater compliance with PQA requirements, lesser challenges result in a more effective QMS, and greater compliance with PQA requirements correlates with a more effective QMS. Finally, a Continuous Improvement Plan was crafted to help HEIs improve at the PQA level.

10:55-12:35 | Room 604

# Friday Onsite Presentation Session 2

Higher Education

Session Chair: Andrea Furkova

10:55-11:20

72013 | *Attitude Towards Academic Promotion Request of Academic Staff at a Thai University International College*  
Sasithon Panyanak, Mahidol University International College, Thailand

In recent years, the academic position has become one achievement in teaching life for the academic staff in Thailand. From the record of one international college, the number of people requesting the position are increasing and decreasing alternately by an average 14 people a year. Therefore, this research is to investigate the Attitude towards Academic Promotion Request of Academic Staff at a Thai University International College. The research instrument is a questionnaire with closed-ended and open-ended questions using a five-point Likert scale focusing on the general opinion, the related regulations and the barriers. An accidental random sample is employed to select the participants to complete the survey from 110 faculty members who teach at an international college at a Thai university but differ in age, sex, working duration, and position. Later, the data is analyzed by the SPSS program while the open-ended questions are analyzed by using a summative content analysis. The results show that the faculty members have positive attitudes towards academic promotion requests. They think that having an academic title is required, important and one way of being successful. On the other hand, they think that it is complicated, time-consuming and the regulations are often changed. In addition, for further research, it would be better to expand the findings by interviewing the faculty members to compare those who have the academic title with the ones who do not in order to get more deep information. Also, a study on a specific case would be required.

11:20-11:45

75487 | *Organizational Cultures as Reflected in Selected University Websites*  
George Amurao, Mahidol University International College, Thailand

Various studies find that different forms of communication, including those found in educational websites, reflect specific organizational cultures. Such cultures can be used to better understand and make further meaning of the activities that educational institutions often write about and publish in their own websites. Drawing from Gerry Johnson and Kevan Scholes' Cultural Web model, this study makes a comparative analysis of the websites of Mahidol University International College and National University of Singapore. Both institutions are leading state universities in Thailand and Singapore. Drawing from the categorical data analysis (CDA), this study looks into six distinct although interrelated components and examines how they help provide "a clearer picture of the wider cultural issues of an organization" (Helmold, p. 33). The selection of said educational websites was done on the basis of the relevant institutions' status as autonomous government universities within the Southeast Asian context. This study hopes to examine the reflection of organizational culture and practices in web communications, if only to see the possible future direction in the area of website publication as suggested by said elements.

11:45-12:10

75895 | *Racial Disparities in Return on Investment: An Analysis of Student Loans in American Higher Education*  
Xuefan Li, University of Toronto, Canada  
Wen Li, Southwestern University of Finance and Economics, China  
Yuxiang Cheng, Peking University, China  
Donghua Li, City High School, Canada

This research delves into the return on investment (ROI) of student loans in American higher education, with an emphasis on racial disparities, notably among Black graduates. Drawing data from the U.S. Department of Education's College Scorecard and the Georgetown University Center on Education and the Workforce, a panel regression model was employed to evaluate variables like 10-year NPV and Earnings-price return. Preliminary results signify that while the payback period for college education investments has elongated for all students, it's notably worse for Black students. Heterogeneity tests further elucidated the moderating effects of gender, race, public versus private institutions, school attributes, and graduation rates. These findings hold profound policy implications. Recognizing the substantial influence of student loans on higher education ROI, policymakers are urged to reevaluate and innovate the student loan landscape, drawing inspirations from studies like Kelchen (2018) and Dynarski and Kreisman (2013) which recommend targeted interventions and simplification of the loan system, respectively. In conclusion, the decision to invest in higher education via student loans is intricate and pivotal. Though they democratize access to education, unmanaged student loans can be financially burdensome. Enhancing financial literacy, leveraging technology, and understanding global and institutional trends are paramount to maximize the ROI in higher education through student loans, ensuring equitable economic outcomes and opportunities.

12:10-12:35

73929 | *Educational Inequality Within the European Union: A Spatial Statistics Approach*  
Andrea Furková, University of Economics in Bratislava, Slovakia

This study aims to investigate the spatial distribution of educational inequality within the European Union (EU) using a spatial statistics approach. Educational inequality remains a significant challenge for policymakers seeking to ensure equal opportunities for all EU citizens. By examining the spatial dimension of this issue, the study contributes to a deeper understanding of the geographical patterns of educational disparities across EU member states. The research employs spatial statistical techniques, including Exploratory Spatial Data Analysis (ESDA) to analyse data on educational indicators such as educational attainment levels and other relevant factors. These indicators are obtained from Eurostat for the most recent years available. The analysis will be carried out in the context of EU regions and we will focus on tertiary education. The findings reveal significant spatial variations in higher educational inequality across EU member states. ESDA techniques help identify clusters of regions with pronounced disparities in access to higher education, providing valuable insights for targeted policy interventions. Spatial autocorrelation analysis quantifies the extent of spatial dependence, highlighting areas where similar levels of higher educational inequality are clustered. Despite efforts to promote equal opportunities, disparities in access to higher education persist across member states. By analysing the spatial dimension of this issue, the study contributes to a comprehensive understanding of the geographical patterns of higher educational inequality in the EU.

12:50-14:30 | Room 604

# Friday Onsite Presentation Session 3

Higher Education

**Session Chair: Emma Mayhew**

**12:50-13:15**

76225 | *Addressing the Elephant in the Classroom: Faculty Perspective on Contract Cheating*

Mona Aljanahi, United Arab Emirates University, United Arab Emirates

Mohammed Aljanahi, United Arab Emirates University, United Arab Emirates

Contract cheating, a phenomenon in which a third party completes an assignment, quiz, or homework for students in exchange for a fee, is becoming increasingly prevalent in institutions of higher education. Underpinned by critical theory and social responsibility theory, this study sought to explore faculty members' perspectives on contract cheating in higher education institutions in the United Arab Emirates (UAE). Through a qualitative phenomenological design, eight faculty members from different disciplines, at both public and private universities in the UAE, were purposefully selected and interviewed. The participants were of different nationalities and comprised four male and four female faculty members. Employing thematic analysis, data from interviews were coded through NVivo data analysis software, and later manually analyzed for overarching themes. The study's findings illustrate how contract cheating caused faculty members to report feeling "incensed" about the cases that had been discovered. Additionally, the participating faculty members shared how they possessed a strong sense of social responsibility toward students and the community. The results also elucidated the fact that participants' hesitation in reporting cases of contract cheating was mainly due to the perceived lack of support provided by their respective institutions, in addition to a lack of clear procedures on contract cheating in the ethics manuals. This study concludes with practical recommendations to assist faculty and staff, managers, department heads, and decision makers to mitigate this phenomenon proactively.

**13:15-13:40**

72426 | *Implementation of 5S Lean Methodology in Reviewing Competencies in a Higher Education Institution*

Jasim Saleh Said AlDairi, Military Technological College, Oman

Yusuf AlKhamisi, Sultan Qaboos University, Oman

The potential of applying Lean Management in Higher Education Institutions has increased significantly in last few years leading to tremendous savings. Reviewing and updating competencies' curriculum matrix is one of the critical and complicated processes that consume time and effort, and this has triggered searching for a scientific and sustainable approach to manage such review. This paper presents a novel approach of implementing Lean (5S) methodology in reviewing technical competencies required for the graduates of the Military Technological College (MTC) in the Sultanate of Oman. The 5S framework has been imbedded into an action plan using the PDCA cycle. As a result, the method applied has helped in sorting out the actual required competencies, the team has identified the required (new, amended, and deleted) competencies in all of the targeted Engineering Departments, in addition, the major wastes within the overall process were identified and the future review process was standardized and documented.

**13:40-14:05**

69909 | *Understanding and Addressing Lower Student Attendance in a Post Pandemic World*

Emma Mayhew, University of Surrey, United Kingdom

Anna Holland, University of Surrey, United Kingdom

Institutions across the sector have seen attendance rates for teaching sessions fall significantly in comparison to pre pandemic levels. There are widespread reports of staff unable to plan their sessions and impact on morale. Students who do attend may have a reduced experience. Those who do not attend regularly may be at risk of reduced attainment and increased risk of failing to progress. This presentation outlines the findings of a student survey, undertaken at a UK university, during Summer 2022. It will explore the key reasons why students decide to attend, or not attend teaching sessions, and how this relates to the key motivations for undertaking a degree. The talk will go on to look at how students understand university expectations around attendance, how they feel cohort attendance impacts their own learning, and how they think that institutions should react. This research is designed to help inform the sector's response to post pandemic attendance issues. These survey results have already gone on to inform a successful university wide plan to increase attendance. This presentation will outline how this research has fed into targeted key messaging used in a student communications campaign, and specific changes to practice, designed to reduce barriers to attendance. As such, these findings are likely to be of interest to the broader higher education community.

**14:05-14:30**

75303 | *Study on the Relations Among Students' Self-efficacy, Task Value Appraisal and Learning Engagement in Medical School in Taiwan*

Yun-Ting Huang, National Cheng Kung University, Taiwan

Shyh-Jou Shieh, National Cheng Kung University, Taiwan

Yuk-Ying Tung, National Cheng Kung University, Taiwan

Changes in medical education require a rethinking of medical curriculum. Currently, the reform of medical education in many countries has focused on the block/integrated curriculum. Many universities have integrated basic and clinical science into the curriculum. It shows the importance of integrated curriculum in medical education. Student engagement during learning activities is a significant and heavily researched educational topic (Christenson et al., 2011). Student's learning engagement is defined as behavioral, cognitive, emotional and agentic aspects of students' academic experience in teaching, learning and research through interacting with other students and teaching faculty (Reeve & Tseng, 2011). Despite the growing interest in the field of student's learning engagement, medical education research in this area is still fragmented. Therefore, the researcher constructed the learning process model and collected the data to examine it. The study attempted to understand students' learning processes in block curriculum in the school of medicine in Taiwan. The study analyzed the data in 4th grade in school of medicine in C University at fall semester in 2022 by quantitative methods. Participants were asked to complete the learning process scale. All items adopted a 6-point Likert scale with a focus on each block curriculum. Structural equation modeling was used to analyze the data. The results of the present study indicated that the learning process model had an excellent fit with the data. Medical students with higher self-efficacy can positively predict their learning engagement in the block curriculum. Medical students with higher task value appraisal can positively predict their learning.

14:45-16:00 | Room 604

# Friday Onsite Presentation Session 4

Higher Education

Session Chair: Aaron Bruhn

14:45-15:10

73966 | *Anxiety of Primary Students Teacher in Learning Statistics and Its Relationship to Statistical Learning Outcomes*  
Melda Jaya Saragih, Pelita Harapan University, Indonesia

Learning statistics is very useful for primary students teachers although they are prepared to be teachers in primary school. Statistics can develop student's critical thinking, logical, and necessary in completing their final project, but some student's teachers do not notice and have learning anxiety which affects their learning outcomes achievement. Learning anxiety is caused by variety of factors and needs to be reduced to achieve maximum learning outcomes. The purpose of this study is to explore the relationship between statistical learning anxiety and statistical learning outcomes and to describe what factors that make students anxious in learning statistics. This study used quantitative approach that explore the relationship between statistical learning anxiety and statistical learning outcomes using the non-parametric test by Spearman Rank correlation test. Data was collected through tests, questionnaires, interviews, and student reflections. Test and anxiety questionnaires results analyzed quantitatively, while interviews and reflections analyzed qualitatively. Tests are arranged based on statistical learning objectives, questionnaires are arranged based on learning anxiety indicators. The subjects of this study were 70 students of the primary student's teacher. The results showed that there was relationship between statistical learning anxiety and statistics learning outcomes in primary students teachers. High statistical learning anxiety has an impact on low student learning outcomes and vice versa. Based on interviews and reflection data, some of the factors that influence student anxiety include information from seniors who say statistics subject so difficult, mathematics prior knowledge students still relatively low, and their fear of the risk of failing in statistics subject.

15:10-15:35

75813 | *Enacting Authentic Learning and Assessment: How Structure and Agency in Higher Education is Mediated by Teaching Perspectives*  
Glen OGrady, RMIT University Vietnam, Vietnam  
Catherine Earl, RMIT University Vietnam, Vietnam  
Hanh Nguyen Thi My, RMIT University Vietnam, Vietnam  
Greenie Maheshwari, RMIT University Vietnam, Vietnam

This paper investigates how University educators perceive and enact authentic learning and assessment positioned as a strategic University directive. Employing Giddens's Structuration Theory and Sannino's model of Transformative Agency, the paper illustrates the intricate constituents of agency and how agency is mediated by personal teaching perspectives. The study investigates 14 educators in an international university who are responding to a strategic directive to employ authentic learning and assessment methods in undergraduate courses. The study utilises interviews, classroom observations, the Teaching Perspective Inventory, and different definitions of authenticity to delve into how educators negotiate authenticity through their pedagogical dispositions. The analysis reveals that the directive for authenticity has neoliberalist and utilitarian overtones. The study observed educators creatively adapting and reinterpreting authenticity in learning and assessment using their own complex milieu of teaching perspectives. They did this by reflexively responding to the demands of authentic learning and assessment using "generative rules" that are reimagined and enacted through the individual's teaching perspectives leading to "transformative agency" where the focus is not only on what authentic learning and assessment is, but also what it can become. The research highlights the role of agency with respect to pedagogical initiatives, wherein educators engage in strategies of resistance and adaptation, informed by teaching perspectives to balance the interests of the University and the pursuit of academic autonomy. The findings underscore the dynamic nature of the relationship between educators and the University, shedding light on the nuanced way agency can be both generative and transformative.

15:35-16:00

75605 | *Reflections on COVID-19's Impact on the Teaching of an Actuarial Studies Course and Assessment of Future Teaching Approaches*  
Aaron Bruhn, Australian National University, Australia

This presentation discusses the impacts of COVID-19 on the teaching of an actuarial studies course at the Australia National University over the years 2020-2023. Some of the strategies used to engage the class in learning and critical skill development for the actuarial profession are critically discussed. Options are now apparent around the teaching approach for this course into the future, with various factors needing to be balanced. These include the need for the course to be regularly updated for current and recent events and professional developments, the need to meet core syllabus aims required by the professional body (Actuaries Institute), and the opportunities with and characteristics of the typical cohort of students that pursue actuarial studies. Thoughts and options are presented, with feedback very welcome around potential best or improved practice.

09:00-10:40 | Room 605

# Friday Onsite Presentation Session 1

## Gender in Education

### Session Chair: Li Zheng

09:00-09:25

73946 | *Critical Analysis on Indonesian Interfaith Women Leadership in Higher Education: Gender Perspective*  
Ariadna Mulyati, UIN Alauddin Makassar, Indonesia

This article discusses about thematic analysis of interfaith women leadership in universities in Indonesia. The problems that have arisen in Indonesia related to women's leadership are the existence of a patriarchal culture, stereotypes, inferiority, gender bias considering women less capable of leading. Consequently, it has resulted in a minimum number of female rectors in both public and private universities. In fact, women's leadership hinges on transformational leadership (feminine leadership style) which includes female value as the most effective leadership style. Likewise, from a religious perspective, women leadership, for example in the concepts of Islamic and Christian religions encourage women for careers in the public sphere as shown in Koran Surah At-Taubah/9: 72, Al-Nahl/16: 97, and in the Bible, the Book of Genesis (Genesis 1: 26-31). Nowadays, there have been many changes for women, even in the context of culture, social, economy, education, etc. Ironically, with all these developments, women are still assumed as incompetent. Therefore, women must be independent and courageous, have the skills to be able to compete well in various sectors, especially in leading a university. Therefore, it is crucial for women in Indonesia to have strong analytical skills, communication skills, courage, listening skills, and assertiveness so that they are able to implement management functions properly. Besides, it is recommended that in terms of government policy and reconstructing the negative stigma against women are urgent to provide more opportunities for women to lead administratively.

09:25-09:50

74081 | *Gender-Based Discriminatory Practices in Terms of Job Hiring and Work Assignments Among DepEd Women Employees of Northern Mindanao*

Ciedelle Grageda, Mindanao State University-Iligan Institute of Technology, Philippines  
Lowell Lucero, Mindanao State University-Iligan Institute of Technology, Philippines  
Faye Fajardo, Mindanao State University-Iligan Institute of Technology, Philippines

This study aimed to determine the discriminatory practices encountered by public school female teachers during job hiring and work assignments in Northern Mindanao, Philippines. It sought to answer the following questions: what is the gender discriminatory practices experienced by female teachers during job hiring and work assignment? what are the areas that need to be improved to enhance job hiring and work assignment practices? The research design was descriptive in nature and utilized both quantitative (survey) and qualitative (FGD) approaches. The respondents of this research were the 262 public school female teachers of Northern Mindanao which comprises of the 14 Divisions. From the data gathered, it was found that female teachers did not experience any discrimination during the job hiring process. They strongly agree that the Institution they were applying is gender inclusive. With regards to work assignment, the respondents noted that their institution ensures there was no favoritism in assigning of workload. However, it appears that there was gender-exclusive practices observed by the respondents during the focus group discussion, such as the following: female teachers were given advisory classes, additional workload like coaching responsibilities for specific school activities while male teachers were preferred to be assigned in hinterlands; given heavy physical work; mostly assigned as property custodian or practical arts teacher, and vacant positions that required skills (e.g., carpentry).

09:50-10:15

73827 | *Making Classrooms Chaotic: Can Classrooms Become 'Safe' Battlefields for Gender Conflict?*

Hayoung Shin, Semyung University, South Korea

This study shares reflections and methods for creating 'safe' classrooms in universities to discuss gender, diversity, inclusion and sexism. In Korean society, in the process of the 2021 presidential election, gender conflict has spread to political conflict and intergenerational conflict. And at the center were college students in their early and mid-twenties. This study empirically explores how out-of-university gender conflicts infiltrated college classrooms. The main points of the study are, first, how students were able to learn how to deal with 'sensitive and political' subjects in a 'safe' space. Second, what online and offline devices should college professors implement to make the classroom feel like a 'safe' battlefield for students. To this end, the researcher used in-depth interviews, students' discussion assignments, and reflection papers with students' responses and instructors' experiments obtained through four liberal arts classes over two years as empirical data.

10:15-10:40

73739 | *College Students' Sexual Orientation and Campus Sexual Harassment: Empirical Evidence From College Student Survey in China*

Li Zheng, Tsinghua University, China  
Ran Zhang, Peking University, China

Many studies have confirmed the prevalence of sexual harassment and its negative impact on victims, as well as the role of sexual orientation in the experience of sexual harassment and the negative impact of sexual harassment on people of different sexual orientations. Researchers are paying more attention to issues such as the differences in the negative impact on victims who have different sexual orientations. However, empirical research in this field by Chinese academic circles is still limited, particularly research focusing on the relationship between college students' sexual orientation and campus sexual harassment. An empirical study based on survey data from 1,438 students at 6 Beijing colleges finds that, first, the frequency of sexual harassment and the proportion of coping measures used by non-heterosexual individuals are significantly higher than those of heterosexual individuals. Second, non-heterosexual sexual orientation has a significant positive impact on the frequency of sexual harassment; furthermore, sexual orientation has strong explanatory power on the frequency of sexual harassment. This study discusses the findings and forecasts future research.

10:55-12:10 | Room 605

# Friday Onsite Presentation Session 2

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Jia Yang Ma

10:55-11:20

75333 | *A Technology-Supported Guidance Model to Stimulate Nursing Students' Development of Critical Thinking in Clinical Practice*

Jaroslav Zlamal, Lovisenberg Diaconal University College, Norway

Edith Roth Gjevjon, Lovisenberg Diaconal University College, Norway

Mariann Fossum, University of Agder, Norway

Simen Alexander Steindal, Lovisenberg Diaconal University College and VID Specialized University, Norway

Andrea Aparecida Goncalves Nes, Lovisenberg Diaconal University College, Norway

Introduction: Critical thinking is a crucial set of skills and abilities in nursing. Earlier research has identified the challenges inherent in stimulating the development of critical thinking due to its multifaceted nature, so the need exists to explore ways to nurture critical thinking. Methods: A complex technology-supported guidance model (TSGM) intervention was developed, tested, and evaluated in four sub-studies: (1) a mixed-methods systematic review that explored similar interventions in the field; (2) a developmental study in which a mobile application that constitutes an integral part of the intervention, Technology Optimized Practice Process in Nursing (TOPP-N), was co-created with key stakeholders; (3) a feasibility study that tested the intervention in a real-life setting; and (4) a pragmatic, mixed-methods randomized controlled trial that evaluated the intervention's effectiveness. Results: Over a one-year timeframe, a multidisciplinary team of nursing students, nurse preceptors, nurse educators, and app developers codeveloped a complex intervention and a working prototype of the TOPP-N application (sub-study 1,2). The intervention, which aims to support the development of critical thinking, was deemed feasible among first-year undergraduate nursing students in clinical practice (sub-study 3). The randomized controlled trial (sub-study 4) showed that the intervention performed as expected in a larger setting, but, while some promising results emerged, we have not yet confirmed the intervention's effectiveness in developing critical thinking. Conclusion: The TSGM intervention has the potential to support the development of critical thinking among undergraduate nursing students in clinical practice, but further investigation is needed to explore its effect.

11:20-11:45

74488 | *Best Practices for Course Design and Learning Management Systems: A Practical Explanation*

Max Williams, United Arab Emirates University, United Arab Emirates

Recent events and current trends have meant a shift in the mode of delivery for many courses, which has inevitably involved the use of a learning management system. Many instructors have felt ill equipped for these changes. The presentation gives an overview of the course "An Introduction to Academic English" which was awarded a Blackboard Exemplary Course Program award 2022. The award program has been running for more than two decades and has evaluated thousands of courses from academic institutions all over the world. Courses are evaluated against a 62-point rubric which focuses on best practices in four main areas: course design; interaction and collaboration; assessment; and learner support. The course designer also focused on designing a course which could be easily adapted for a blended or asynchronous mode of delivery, and for delivery to larger cohorts: for this reason, careful consideration was also given to course management. The presentation demonstrates these aspects of course design by giving practical examples which participants will be able to replicate in their own courses.

11:45-12:10

75460 | *Exploring the Impact of Teaching Design History on Creativity and Intrinsic Motivation: Curriculum Design and Learning Outcomes*

Jia Yang Ma, Nanjing Forestry University, China

Yue Jun Zhao, Jiangsu Second Normal University, China

The history of design is a foundational course for design majors in universities worldwide. Typically taught from a purely theoretical standpoint new university students who may lack foundational knowledge in the field often find this course tedious. They frequently want to express themselves creatively in design as soon as possible. In response, this study altered the teaching approach. Instead of the conventional "linear lecture" based method, we introduced an exploratory method centered on "design styles". This approach uses styles as a starting point, guiding students to delve into temporal and spatial contexts, developmental reasoning, key figures, social impacts, and more. It encourages them to explore design history through stylistic representations and to layer their personal interpretations of design styles into practical icon design exercises. A total of 30 students participated in this study to assess the teaching method's effectiveness. A statistical T-test comparing the pre-study and post-study results confirmed that the "style-centered" approach enhanced students' creativity and intrinsic motivation. This indicates the method's efficacy in teaching design history. Furthermore, linear regression analysis was employed to understand the relationship between creativity and intrinsic motivation. The findings revealed that creativity had a notably positive influence on intrinsic motivation through "style-centered" design history instruction. Historically, a lack of motivation has been a challenge in history courses. However, the style-centered approach to teaching design history has been proven effective. Future history curricula should consider students' learning preferences and aspirations to ignite their passion for learning.

12:50-14:30 | Room 605

# Friday Onsite Presentation Session 3

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Jenika Gobind

12:50-13:15

76056 | *Bridging Asynchronicity and Engagement: Data-Driven Insights into Flipped Learning*

Ivana Vulic, Xi'an Jiaotong Liverpool University, China

Alan Meek, Xi'an Jiaotong Liverpool University, China

Advocates of flipped and blended learning have reported on how these models encourage students to actively engage and become agents in their own learning. There is, however, limited evidence on the extent to which asynchronous online learning materials developed for flipped learning programmes support students to actively engage in their learning. Using back-end data analytics, this study aims to demonstrate the behaviour patterns exhibited by students in a programme where 30% of the flipped learning curriculum design is delivered asynchronously online. A cross-sectional case study research design within a quantitative framework was used. Online content used to teach foundational year students (n=3957) English for Academic Purposes at a British-Asian university in China was analyzed. This included teacher-generated videos, comprehension quizzes, and activities linked to subsequent in-person sessions. A prominent finding of this study is that students do in fact take advantage of the unrestricted access to online materials, although overall asynchronous student engagement still needs in-class teacher action to be supported. In summary, data-led investigations into students' online behaviour can advance the pedagogical design and underpinnings of flipped learning along with enhancing educators' adeptness in navigating blended learning environments.

13:15-13:40

72965 | *Enhancing Flexibility and Independence in Learning: An Examination of the Agile-Blended Learning Approach in Hong Kong*

William Ko-Wai Tang, Hong Kong Metropolitan University, Hong Kong

Agile-blended learning is an innovative teaching approach that combines the features of agile learning and blended learning to create a personalized and flexible learning experience enabled by technology. With agile-blended learning, students have greater control over their learning experience. This study aimed to investigate the effectiveness of the agile-blended learning approach by designing a program that utilized YouTube channels and guided study during lectures and tutorials for an Early Childhood pre-service teacher program in Hong Kong. The results demonstrated that this approach was highly effective in enhancing students' flexibility and independence in learning. The majority of students preferred this learning approach over traditional methods, as it was tailored to their individual needs and allowed them to make more efficient use of class time. Based on the findings and experiences gained from implementing the agile-blended learning approach, this paper provides recommendations for designing and implementing a more effective and practical agile-blended learning approach.

13:40-14:05

75453 | *Exploring the Use of Digital Escape Rooms on Postgraduate Students' Academic Achievement and Intercultural Awareness in Management Education: A Case Study in the UK*

Eleni Meletiadiou, London Metropolitan University, United Kingdom

In the past few decades, there has been a shift from passive face-to-face learning to innovative digital game-based learning which promotes student autonomy and experiential learning. This paper presents an educational intervention that addresses the gap in the literature regarding the impact of Digital Escape Rooms (DERs) in Management Learning and Education offering insights of the adoption of this strategy in the UK. This revolutionary method was employed with 80 postgraduate HRM students in terms of a Global HRM Course. Students were taught various Intercultural management theories in terms of a module. The ultimate goal of this project was to improve students' interaction, academic achievement, and intercultural awareness responding to the increased demand for hybrid learning strategies catering for all learners' needs. DERs were used as a revision tool to enhance international students' command of the second language (English) and of cross-cultural theories while working in teams. Learners offered anonymous feedback via Mentimeter after participating in a DER activity before their final group assignment submission. Learners confessed that the use of DERs had a positive impact on student teamwork and learning attitudes, academic achievement, development of intercultural awareness, attendance, retention, and progression. They revealed that DERs increased their autonomy, interest in the theories learnt and bonding as teams. It also helped even low-performing students better understand and retain the theories learnt. This project aspired to support educators, students, and academic managers by offering useful recommendations for the effective use of DER tasks into their existing teaching practices and activities.

14:05-14:30

76004 | *Moving Away from Summative Assessments: A South African Higher Education Perspective*

Jenika Gobind, University of Witwatersrand, South Africa

South African higher education is fixated on traditional assessments methods. Which are based on weighted timed written assessment tools with and predetermined timeframes. Authors like Gibbs and Simpson have stated that what influenced students most was not the teaching but the assessment, this point becomes the key foci of the paper. That looks at conditions that can harness greater learning through creative non-traditional assessments tools rather than traditional timed written assessments that need to be completed with limited demonstrable learning. Following a qualitative case study research methodology, a sample of 15 academics and 15 students were interviewed to understand the merits of traditional timed written assessments and the potential of moving away from these assessments. Findings suggest that academics are open to non-traditional assessment tools while higher education institutions are set in their practice. Students agreed that non-traditional assessments allowed for paced and manageable learning. The qualitative approach did, however, limit the number of participants. Future researchers may consider expanding on this study to include other case studies or institutions of higher learning. While older academics did not understand the need for change, as they firmly believed that if the process has worked there clearly is no need for change. However, the paper does persist to demonstrate that the need to adopt creative non-traditional assessment methods is necessary if learning is to be harnessed and retained.

14:45-16:00 | Room 605

# Friday Onsite Presentation Session 4

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Jennifer Black

14:45-15:10

76077 | *Generative AI Tutors & Project-Based Learning: Boosting Financial Literacy in Japanese Students*

Jon Gorham, Chuo University, Japan

Daniel Mills, Ritsumeikan University, Japan

Promoting financial literacy among university students is crucial in today's complex economic landscape. This study addresses the research gap in innovative pedagogical approaches by investigating the efficacy of integrating ChatGPT, a generative AI tool, into a Japanese university elective class focused on financial literacy. Thirty students at a private university in Eastern Japan took part in this 14-week course, which was taught in English. A generative AI tutor was used by the students to explore various personal finance topics. The students used what they learned to create learning artifacts such as a personal webpage and digital presentations. A survey was administered to the students at the beginning and end of the class. The survey instrument consisted of 18 quantitative items organized in three categories (1) Financial Knowledge, (2) Financial Behavior, and (3) Financial Attitude. Several open-ended questions were also included to gain a deeper understanding of the quantitative responses. Preliminary findings indicate a positive impact on student learning outcomes, and participants found the AI-powered interactions engaging and informative. Students in the elective course also displayed confidence in grasping intricate financial concepts. Moreover, qualitative analysis of post-interaction reflections revealed a deeper conceptual understanding and improved application of financial principles in real-life contexts. The results of this research will benefit educators, researchers, and practitioners who wish to understand how generative AI can be used to cultivate financial literacy and prepare students for a more secure and informed financial future.

15:10-15:35

73951 | *GPT Chat Technology and Its Role in Promoting Creativity in Education*

Mariam Alkalbani, Mohamed bin Zayed University for Humanities, United Arab Emirates

With the rapid advancement of technology, education is witnessing a remarkable shift in the use of tools and techniques in the classroom. Among these innovative technologies, GPT Chat is emerging as a promising tool to foster creativity in learning. GPT chat technology is based on artificial intelligence and allows the creation of intelligent and advanced conversations between students and teachers. This technology fosters creative interaction between teachers and students, allowing students to interact with educational content, ask questions and express their ideas freely. It also contributes to the development of students' creative skills, such as critical thinking, creative design and innovation. In addition, creativity in education can be expanded through the use of GPT chat technology for communication and shared learning across time and space. This study aims to achieve several main objectives, such as analyzing the role of GPT chat technology in promoting creative interaction, studying its impact on the development of creative skills, and exploring the possibility of expanding the boundaries of creativity in education. The study will follow a comprehensive research methodology that includes analysis of previous studies and questionnaires of specialists. The study is expected to show that GPT chat technology plays a crucial role in promoting creative interaction and developing students' creative skills.

15:35-16:00

73452 | *Using AI Tools in The Online Classroom: ChatGPT: Enhancing Critical Thinking and Authentic Assessments*

Kim Carter-Cram, Boise State University, United States

Jennifer Black, Boise State University, United States

Artificial Intelligence is not coming. It is here, and it is here to stay. This presentation examines ways in which artificial intelligence language model chatbots (such as ChatGPT) can be used as an opportunity to rethink and reimagine teaching practices both in face-to-face classrooms and in online environments. Our presentation examines several problems regarding the use of AI in educational settings, including, but not limited to, language and comprehension-related challenges, concern about students' overreliance on a machine rather than developing their own thinking, and instructors' apprehension about AI being "the ultimate cheating tool." Artificial Intelligence poses a threat when we ignore it, forbid it, or fail to do the intellectual and experimental work of exploring its possibilities. However, our findings show that by employing AI with intentionality and purpose, we can actually encourage creative and critical thinking, facilitate dialog, and reinforce content knowledge in our face-to-face and in our online classrooms. Changing the way we think about and use AI can allow educators the opportunity to create spaces for students to feel less isolated, to help support knowledge acquisition, and to allow for innovative and analytical student-centered thinking, all of which ultimately lead to greater student engagement in our online and face-to-face courses.

09:00-10:40 | Room 607

# Friday Onsite Presentation Session 1

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Lilia Halim

09:00-09:25

73823 | *Gender Disparities in Perceptions of Digital Device Use and Reading Literacy: Insights from PISA 2018*

Bagus Hary Prakoso, National Research and Innovation Agency, Indonesia

Safari, National Research and Innovation Agency, Indonesia

Evi Sopandi, National Research and Innovation Agency, Indonesia

The disparities in literacy skills between genders are attributed to how masculinity and femininity are taught to children, influencing the activities deemed appropriate for each gender. Another study suggested that incorporating digital literacy into education leads to a more dynamic and effective classroom environment. However, when it comes to higher education, there seems to be no impact of digital media literacy on students' academic achievement. The objective of this research was to explore whether male and female students perceive the use of digital devices differently when it comes to reading literacy, based on the PISA 2018 test. The research employed a quantitative approach, specifically T-test analysis. The study population comprised 15-year-old students in 2018, with a sample size of 15-year-old students who took part in the PISA test across 80 countries. Data for the study were collected through questionnaires completed by 612,004 students from 80 countries. The study discovered a positive correlation between students' attitudes toward digital devices and their achievement in digital reading. Additionally, the results indicated a significant divergence between male and female students' perspectives on the use of digital devices for reading literacy. However, the research revealed that most respondents provided low or moderate ratings on the questionnaire, suggesting that students do not extensively utilize digital devices during classroom lessons.

09:25-09:50

73446 | *Students as Partners: The Good, the Bad, and the Reality – Three Case Studies in Asian Studies*

Adam Zulawnik, University of Melbourne, Australia

Including undergraduate students in research projects may be seen as a noble and beneficial initiative that forms a nexus of teaching, research, and innovation. In this presentation, I introduce a case study based on three prominent student projects I directed between 2020 - 2023. All three projects resulted in formal and well-received publications, two (2020 and 2021) in books with Routledge: 'Interviews with North Korean Defectors: from Kim Shin-jo to Thae Yong-ho' (2021), 'The History of Hallyu: from the Kim Sisters to BTS' (2023). Through this case study, I aim to highlight the ups and downs of student research projects ('students as partners'), ranging from high student satisfaction and mutual benefit to complex ethical issues such as navigating the divide between 'fair' authorship and acknowledgment and real-world publisher requirements and expectations. I argue that academia and publishers have a long way to go in terms of facilitating an environment that would allow for the achievement of the 'students as partners' ideal. Finally, I provide several suggestions from my experience as a facilitator of three successful projects with the hope of improving both student and teacher satisfaction.

09:50-10:15

75088 | *A Project to Enhance Mutual Support Between College Students and the Elderly Through the Use of Generative AI*

Kaoru Mita, Jissen Women's Junior College, Japan

Maiko Oikawa, Yamano College of Aesthetics, Japan

Mika Shirao, Jissen Women's University, Japan

In Japan, the phenomena of a declining birthrate coupled with an aging population manifest as urgent societal challenges. It is vital for the elderly population to gain exposure to contemporary technologies and novel thought processes through collaboration with younger generations. Similarly, it is essential for the young to have avenues to derive wisdom from the elderly. Yet, in reality, the opportunities for meaningful interaction and mutual support between these diverse age cohorts are constrained and limited. We have facilitated various opportunities for intergenerational exchange. During the COVID-19 pandemic, we devised ways for students and the elderly to interact in a safe environment using ICT, even when outings were restricted. In 2023, we made further efforts to create opportunities for students and the elderly to collaborate, promoting mutual understanding and support. Two projects were designed and implemented, both of which provided opportunities to leverage generative AI technology. The first, the Karuta Project, centers on Karuta, a traditional Japanese card game. In this project, students and the elderly collaborated to create karuta cards with themes focusing on 'health' and 'beauty.' Both parties contributed to creating the lines of karuta, while the designs of the cards were crafted by students, with the support of AI. The second, the Short Story Project, involved using generative AI to help students create stories inspired by the memories of the elderly. These stories were then revised based on advice from the elderly. The presentation will outline the activities undertaken in both projects and analyze the results.

10:15-10:40

75816 | *Exploring the Influence of Gender and Social Economic Status on Attitude, Social Norm, Perceived Behavioral Control Towards Pro-environmental Behaviour*

Lilia Halim, Universiti Kebangsaan Malaysia, Malaysia

Mee Yeang Chan, Universiti Kebangsaan Malaysia, Malaysia

Norshariani Abd-Rahman, Universiti Kebangsaan Malaysia, Malaysia

Climate change is a pressing issue that requires action from individuals and society. Theory of planned behaviour suggests attitude, social norm, and perceived behaviour control as key factors that influence pro-environmental behaviour among students. This research aims to explore the influence of gender and social economy status (SES) on attitude, social norm, and perceived behavioural control on climate actions. To investigate these relationships, a survey was conducted among 802 form 2 students (aged 14) from six states in Malaysia. A MANOVA analysis was conducted to analyse the influence and interactions of gender and SES on attitudes, social norms, perceived behavioural control in climate actions. The results indicate a statistically significant difference in terms of gender on the attitude, social norm, and perceived behavioural control towards pro-environmental behaviour. Therefore, promoting gender equality and challenging gender stereotypes can encourage more students to engage in pro-environmental behaviours. On the other hand, there was no significant findings in terms of socioeconomic status on students' attitudes, social norm and perceived control behavioural on climate actions. The interaction between gender and socioeconomic status also does not yield a significant difference on the three independent variables. This research contributes valuable insights to the field of environmental psychology and sustainability by highlighting the interplay of psychological factors and sociodemographic variables in influencing climate actions. The results also can inform the development of interventions aimed at promoting climate change education among students of diversity.

10:55-12:35 | Room 607

# Friday Onsite Presentation Session 2

Learning Experiences, Student Learning & Learner Diversity

**Session Chair: Keith Miller**

**10:55-11:20**

75842 | *The Effect of Mathematical Communication, Critical Thinking, and Problem-Solving Skills on Mathematical Concepts Understanding in Indonesia*

Samuel Lukas, Universitas Pelita Harapan, Indonesia

Patricia Daniela Iman, Lentera Harapan School, Indonesia

Mathematics is one of the important subject to be taught to children from an early age. Mathematics concept understanding can shape students' knowledge so as to help in the development of knowledge at a higher level of education. The purpose of this study was to determine the effect of mathematical communication, critical thinking and problem-solving skills on the understanding of mathematical concepts possessed by grade VI elementary school students in Lentera Harapan schools, Indonesia. This study was conducted using a quantitative approach by distributing five test items to 54 students. Instruments are tested valid and reliable. The results found that mathematical communication, critical thinking and problem-solving skills has positive effect on the understanding of mathematical concept.

**11:20-11:45**

74194 | *Do Prior Knowledge of Advanced Mathematics Influence Academic Confidence of Students Taking Different Pre-university Chemistry Courses*

Kok Keong Raymond Hee, University of Nottingham, United Kingdom

The relationship between Chemistry and Mathematics are directly proportional in the perspective of science, technology, engineering, and mathematics (STEM) education. This study investigates the relationship between prior advanced mathematical knowledge attained in high school could predict the outcome of student's overall confidence in studying Pre-University Chemistry courses. Mathematics is often perceived as a subject that bridges and connects scientific concepts including Chemistry. Most students, however, struggle with the transition from mathematics to chemistry due to wide disparities between the two theoretically but a very slim margin in terms of using mathematical applications into learning STEM subjects, particularly chemistry. This paper uses a mixed-method approach that involved quantitative surveys using questionnaires and selected qualitative interviews using Pre-University students as research samplings. Preliminary findings found positive significant correlation between students' mathematics background played indicative confidence levels in Pre-University Chemistry. Most participants agreed that good mathematical skills in high school play major role in shaping their confidence in Pre-University Chemistry including the integration of mathematical equations, algebra and certain calculus application would support their understanding within the chemical concepts and crucial for their overall understanding in the subject. My findings also suggest that there is a need of a more integrated approach by educators in teaching mathematics and chemistry at high school level with primary emphasizing the interconnections between the two disciplines by providing sufficient support in order to enhance greater confidence and competence level.

**11:45-12:10**

75783 | *Investigating the Relationship Between Math-Related Motivations and Math Achievement in Emirati Early Adolescents Through the Lens of Expectancy-Value Theory*

Shaljan Areepattamannil, Emirates College for Advanced Education, United Arab Emirates

A strong background in math is vital for students to excel in today's job market, especially in STEM fields. Therefore, a top-notch math education is essential to prepare students for what lies ahead. However, it has been observed that Emirati students from the United Arab Emirates consistently underperform on international math assessments, underscoring the imperative to understand the underlying causes of these outcomes. Therefore, this research explored the connection between Emirati early adolescents' beliefs about their own math abilities (i.e., math self-concept) and their drive to learn math (both for its own sake and for practical benefits) within the context of the expectancy-value theory. Data were collected from 7,915 Emirati eighth grade students with a mean age of 13.61 years who participated in the Trends in International Mathematics and Science Study (TIMSS) 2019. We used methods such as path analysis and bootstrapping to study the relationship between these factors, and to understand how valuing math learning influenced the link between students' confidence in their abilities and their actual performance. Interestingly, both student confidence in math and enjoyment of learning were associated with better achievement. However, the view that math is just a useful skill was not directly associated with better outcomes. Rather, enjoyment of learning played a critical role in linking confidence and achievement. This study underscores that feelings and beliefs about math play an important role in student achievement. It underscores the importance of fostering self-confidence and enjoyment of math learning in young Emirati students.

**12:10-12:35**

73673 | *Using the Novice – Expert Coaching Method to Encourage Engagement of Under-Represented Groups in Computer Programming*

Keith Miller, University of Missouri-St. Louis, United States

Fatemeh Mardi, Independent Scholar, United States

There is a well-documented problem in science, technology, engineering, and math (STEM): the under-representation of various groups in professional STEM roles, and their prior under-representation in undergraduate STEM majors [1]. Based on our experiences in working with middle school African American girls in a summer STEM program, we propose using a pedagogical strategy we call "novice-expert pair coaching" to encourage all students to learn computer programming [2]. We think that this strategy will be particularly helpful for under-represented groups, and we think that learning to program can enable deeper engagement with all STEM disciplines. This talk will describe the novice-expert pair coaching technique, and our experience with it. We will also detail how to put the strategy into practice, both in a face-to-face classroom, and in an online class. Finally, we will suggest that this strategy works best early in a students' attempts to learn to code, and that it leads gracefully into students' active learning after mastering the basics of programming. We are convinced that active learning is a particularly useful strategy for teaching programming to under-represented students.

12:50-14:30 | Room 607

# Friday Onsite Presentation Session 3

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Maria Romina Labrador

12:50-13:15

74162 | *How to Optimize Experiential Education in Traditional Schools and Communities to Boost Students' Leadership, Emotional Intelligence, and Adaptability Amidst Global Changes?*

Hassan Iqbal, Paradise International College, Peru

This study explores the potential of blending experiential education with traditional classroom settings and real-world community engagement to foster students' leadership skills, emotional intelligence, and adaptability. Traditional education systems' limitations in nurturing critical thinking, emotional intelligence, and diverse intelligences have become evident. The COVID-19 pandemic highlighted the importance of leadership skills and adaptable mindsets. However, these attributes have not been fully cultivated to facilitate comprehensive global development. To address this gap, the research investigates student leadership practices as a basis for innovation, emphasizing the shift from outdated models to dynamic solutions. The study considers the integration of in-person classroom education and remote learning experiences during the pandemic, envisioning a novel educational paradigm that combines the strengths of both environments—internal school setups and external engagements (outdoor, community-based learning)—augmented by digital connectivity. Drawing from personal experiences, the researcher highlights tangible instances of experiential learning, including the launching English magazines, exploring indigenous language and culture decline (case study), fostering entrepreneurial projects from early educational stages. This paradigm envisions a progressive "school of the future" that molds learners into leaders. The proposed approach involves a comprehensive redesign of student-centered strategies, converging learners with society in a reciprocal learning laboratory. Ultimately, this research aims to illuminate the effectiveness of merging experiential education with conventional schooling. By examining the intersection of traditional education, community engagement, and digital connectivity, this study contributes to the ongoing discourse on educational reform and the cultivation of versatile future leaders in the communities of Lima, Tacna, and Tarapoto, Peru.

13:15-13:40

73864 | *Implementing Multimodalities Approach to Enhance Students' Learning: Benefits and Challenges*

Vera Syamsi, Sampoerna University, Indonesia

With the advancement of digital technology, communication does not rely solely on linguistic mode, but through other modes as well which are visual, gestural, spatial, audio. This has also been embraced by education experts who promote to leverage a combination of those modes which was known as multimodalities in learning, believing that learners will learn better when they experience learning in variety of ways that can accommodate various learning styles. When multimodalities approach is implemented in learning, students learn and read texts using various modalities and are not dependent only on printed texts; many would find reading materials from YouTube videos produced as learning media. Using narrative inquiry and content analysis approach, this research paper presents the strengths and weaknesses of utilizing multimodalities in learning focusing on how well or accurate students can comprehend learning materials when they learn through watching YouTube videos that they later expressed it on a Google Site developed as their learning artifact. Data was collected through a survey and end-of-the-semester reflection students wrote after attending the course, besides analyzing the accuracy of the content of their Google Site. The results show a competition between students' comprehension versus creativity as the impact of the modalities utilized, and in turn, teachers / lecturers must find strategies to balance or prioritize between the two.

13:40-14:05

75500 | *Moderating Effects of Explanation on Relations Between Investigation and Student Learning Outcomes*

Pey-Yan Liou, Korea University, South Korea

Eunjung Myoung, Korea University, South Korea

The effectiveness of inquiry-based instructional practice in promoting student learning outcomes has been a topic of ongoing debate. This study aims to address this debate by examining the specific components of inquiry-based instruction, namely investigation and explanation. It further explores the moderating effects of explanation on the relations between investigation and student learning outcomes, science achievement, and attitudes toward science in an inquiry-based learning environment. Student attitudes toward science are conceptualized as self-efficacy, intrinsic motivation, and extrinsic motivation. Using data from the Programme of International Student Assessment, we conducted moderated regression analysis on nationally representative 15-year-old student samples from Korea (N=5581) and the United States (N=5712). The results indicated that explanation significantly moderated multiple relations between investigation and student learning outcomes. Notably, the moderating mechanisms differed between Korea and the United States. In Korea, a higher implementation of explanation alleviated the negative effect of investigation on achievement, whereas it worsened the negative relation in the United States. Regarding attitudes toward science, a higher level of explanation enhanced the beneficial effect of investigation on student self-efficacy, but a lower level of explanation was not significantly associated with the relation in Korea. Explanation significantly moderated the relation between investigation and intrinsic motivation in both Korea and the United States. In Korea, a lower explanation resulted in a negative effect of investigation on intrinsic motivation. The pattern was different in the United States. Furthermore, the effect of investigation on extrinsic motivation was significantly moderated by explanation only in the U.S.

14:05-14:30

71813 | *Enhancing the Reading Performance of Grade 1 Beginning Readers Using Video Tungo sa Pagbasa – Approach (VTSPA)*

Maria Romina Labrador, Pinagbuhatan Elementary School, Philippines

Reading is an essential skill that children must master to be successful in school; it is needed to grasp most subjects and lessons offered. The ability to read is required. But because of the problem brought about by the COVID-19 pandemic, one of the problems met in our school is how to help children who have difficulty learning to read and parents who do not have the time to teach them because they must work to meet the needs of their families. This study entitled Video Tungo sa Pagbasa (Project VTSP) was created because the researcher aspires to help children bridge their ability in beginning reading to become functional and developed readers. The researcher facilitated this project to 18 non-struggling readers from Grade One Section Duhat, one group acted as a control group and the other an experimental group. After class, the students in the experimental group were asked to watch short teacher-made reading video lessons that will help enhance their beginning reading skills in Filipino. Close monitoring of the pupil's improvement was assured through Pre-Test, Post-Test, daily assessment using Kahoot. The result of the study showed that there is significant change in the ability of students in beginning reading after the program was implemented. A parallel study maybe conducted by other teacher-researcher to validate the effects of the intervention in enhancing the performance of beginning readers.

14:45-16:00 | Room 607

# Friday Onsite Presentation Session 4

Learning Experiences, Student Learning & Learner Diversity

**Session Chair: Sara Neswald**

**14:45-15:10**

73776 | *Home Language Environment of Singaporean Chinese Families – Implications in the Early Years of Primary School*

Li Li, Nanyang Technological University, Singapore

Siaw Ee Teo, Ministry of Education, Singapore

Yingjiang Zheng, Ministry of Education, AST, & SCCL, Singapore

The rapid shift of home language from Chinese language (CL) to English language (EL) was frequently reported in the past twenty years in Singapore. The diverse language proficiency of children entering primary schools poses great challenges to the language teachers. Parents' support in CL learning in the first two years of the primary school was highlighted as oral language is focused in the current CL curriculum for these two levels. The current study seeks a better understanding and implications in parents' support in CL learning before or after their children entering primary schools. 380 parents of Chinese ethnic group in Singapore were recruited in the study. Their children learn CL in preschools (aged 5 and 6) or primary schools (aged 7 and 8). Parents answered a questionnaire asking about their children's home language environment (HLE), including parental and child's language use at home, the various language related activities at home in EL and CL, and the availability of language resource at home in both languages, along with the demographic and background information of the family. Echoing the findings from the previous studies, we found a more EL preferred HLE from most of the surveyed families. For different age groups, different patterns of association were found among children's language related activities, shared- activities with parents, and language preference at home. These findings indicate the possible changes in HLE when children entered primary schools. The dynamics in parents' practices provide considerable implications in the CL teaching practices in Singapore primary schools.

**15:10-15:35**

71544 | *Politeness Strategies and Discourse Features of ESL Grade 7 Students' Emails*

Monique Bernardino, De La Salle University, Philippines

Hannah Aven Guarin, De La Salle University, Philippines

Patrick Bryan Ablaza, De La Salle University, Philippines

Recently, students communicate with their teachers through emails but with little awareness of politeness strategies in email conventions and how they present themselves through their language use. Hence, their lack of pragmatic knowledge in email structure makes them perceived negatively. In this study, 96 male Grade 7 students received a brief module about pragmatic implications and formal structure in emails and teacher's instruction and demonstration in email conventions. Results from the 328 emails produced showed that despite the simplified synchronous discussion and joint construction session, asynchronous lesson, and the teacher's guidance, there were variations in how students wrote apologies, requests, invitations, and excuse letters. This implies the need for explicit instructions about email politeness and the integration of pragmatics-based pedagogical interventions.

**15:35-16:00**

76100 | *Ritual and Intent in a Renaissance Faire (Taiwan)*

Sara Neswald, Soochow University, Taiwan

This study explores the effect of intentional embodied ritualization in an advanced college ESL experience. Forty-six sophomore students (from two different classes) were asked to work together to create a complete half-day Renaissance Faire experience for students and faculty at the Soochow University Campus, Waishuangxi, Taipei. Half the student groups applied intentional ritualization. Assessments indicate that groups applying intentional ritualization had greater retention of historical data, could better express social significance of various aspects of Renaissance culture, and reported greater appreciation for the gains attained during the Ren Faire experience as a whole. Results indicate that intentional ritualization, when properly explained to students and when properly engaged by students, provided markedly improved educational experience.

09:00-10:40 | Room 608

# Friday Onsite Presentation Session 1

Language Development & Literacy

Session Chair: Odonchimeg Tumee

09:00-09:25

73953 | *The Goblin Marketplace of Ideas: Navigating Christina Rossetti and Controversial Topics in the L2 Classroom*  
Rocky Burton, Toyo University, Japan

Christina Rossetti's poem "Goblin Market" is as discomfoting as it is beautiful. The story about two young sisters living near a seemingly magical bazaar run by goblins peddling fruit that poisons the very soul contains allegories of sexual desire, predation, and virtue that are extremely challenging to approach in the usually conservative setting of an L2 classroom. The present study argues, however, that discussing this poem and its themes, abstracted though they may be, is necessary for the sake of holistic education. The study provides a framework for teaching controversial topics using this poem and others as a foundation for facilitating discussions of differing philosophies and values as well as the applications of the source material across cultures. It analyzes student receptivity to the poem in the form of essays, presentations, and responses to questionnaires in order to determine sensitivity to the subject matter in concert with the necessity of exploring complex themes. The goal of the study is to examine student approaches to interpreting and applying the readings to their worldviews and to promote critical literacy.

09:25-09:50

76047 | *An Assessment of TOEIC Listening and Reading Proficiency Tests of Foreign Graduate Students: Basis for Comprehensive Enhancement Program*

Haydee Claire Dy, Lyceum of the Philippines University, Philippines  
Jared Manalastas, Lyceum of the Philippines University, Philippines  
Mariel Coleen Villanueva, Lyceum of the Philippines University, Philippines  
Albert Navarra, Lyceum of the Philippines University, Philippines

This study aimed to assess the current English Proficiency Program of the foreign students enrolled in the Claro M. Recto Academy for Advanced Studies at LPU Manila during academic year 2021-2022. A Mixed Method research design was used in this study specifically an Explanatory Sequential, that explores both quantitative and qualitative data. The researchers collected and analyzed the TOEIC (Test of English for International Communication) results of the 179 foreign graduate students about their English proficiency, both in listening and reading skills and then collected online survey to explain and elaborate the significant experiences of the 25 students in taking-up English Proficiency program. It was revealed that most of the participants are classified in the Basic Working English Proficiency level which indicates further improvement in the language facility that will help them in the workplace and academic communication. These findings indicated that the respondents perceived the English Enhancement Program has a positive and huge impact on their language acquisition in English. This implied that the existing program has an effective way to develop and improve the proficiency level of the English language. However, it was revealed in the findings that most of the respondents are still recommending the existing program to revisit and improve methods and teaching strategies that can cater to the demands of the language learners.

09:50-10:15

73973 | *Use of Graphic Novels in Improving English Reading Comprehension Skills of Senior High School Learners*  
Claide Kinneth Saludar, Bernardo D. Carpio National High School, Philippines

Reading is an essential and vital language skill and is crucial for learning. It forms the foundation where other language skills, including writing, listening, and speaking are developed. Consequently, improving learners' reading comprehension has been the subject of much research given learners' poor performance in this skill as shown in international and national assessments. This mixed-method study gauged the effectiveness of graphic novels as instructional materials in improving learners' reading comprehension and their response to their use as instructional material. Utilizing a quasi-experimental research design, 4 Grade 11 classes were randomly assigned as the control and experiment groups. The control groups were exposed to a full-text version of a novel while the experimental groups were exposed to a graphic novel. Mean and Standard Deviation were used to determine the learners' reading comprehension levels in the pre-test and post-test and determine how dispersed the scores were. Paired sample t-test was employed to determine the significant differences between learners' pre-test and post-test reading comprehension levels. A focus group discussion was also conducted to gather qualitative data on learners' perceptions of the effects of the use of graphic novels in improving their reading comprehension. Key informant interview was also employed to collect the teacher's insights on the use of graphic novels. Results showed a significant difference in learners' reading comprehension levels when graphic novels were used as instruction materials. The teacher and the learners also had positive perceptions of the use of graphic novels as instruction material in improving English reading comprehension.

10:15-10:40

73964 | *Emotive Meanings of the Most Frequent Consonants in the Modern Mongolian Literary Language*  
Odonchimeg Tumee, Khovd Branch of National University of Mongolia, Mongolia

This article is devoted to the phono-semantic study of the emotive meanings of consonant sounds of the Mongolian language by the psycholinguistic experiment with native speakers. Studies of sound symbolism, including psycholinguistic measurements, have led to the conclusion that there is an initial connection between the sound shells of words and their meanings in different languages. Thus, the idea that existed in linguistics for a long time about the content of sound forms, which tend to one way or another to correspond to the meaning of words, was confirmed. We have chosen the most frequent consonants in the modern Mongolian literary language. As a result of the experiment, the emotive meanings of the selected consonants are marked and it is stated that the sounds vividly express the emotive meanings associated with the internal state, such as discomfort, unpleasant sensations, and feelings, or calmness, silence, as well as pride, joy. Consonants with positive or negative emotional meanings are defined during the experiment. We consider that this may be due to the acoustic-articulatory features of this sound. But it is also revealed that some sounds have neutral and different ratings. As for the different assessments on one or another basis, this can be explained by two reasons: on the one hand, the system-structural nature of the language and, above all, its phonological system, and on the other, secondary (secondary) motivation based on the influence of lexicosemantic units in these languages.

10:55-12:10 | Room 608

# Friday Onsite Presentation Session 2

Language Development & Literacy

Session Chair: Laura Taylor

10:55-11:20

73891 | *A Review of Literacy Practices in Relation to Ethno- and Socio-cultural Contexts*  
Viknesh Subramaniam, National Institute of Education, Singapore

The purpose of this paper is to examine the current understandings of literacy and how it is practiced in relation to ethnicity and socioeconomic status. This review was conducted as part of a larger doctoral study that seeks to describe and explain the literacy practices of low-, middle-, and high-income Singaporean Indian parents of preschool-aged children. As literacy practices are highly contextual, this review draws from a sample of international studies and purposefully includes articles from Singapore. The review first traces the expanding definition of literacy, from simply "reading and writing" skills to multiple and multi-modal socio-cultural and ideological practices. It then presents the themes found in a comprehensive survey of studies of early home literacy practices of parents and how these practices are related to ethnic and socioeconomic cultures. These themes include the goals, values, and attitudes inherent in parents' literacy practices, parental modelling and participation, and their provision of literacy materials. The review also draws connections to the ideological, ethnic, and socioeconomic influences on these practices. Lastly, this paper discusses the theoretical, empirical, and methodological gaps in the current literature about literacy practices and proposes some possible research directions for future research.

11:20-11:45

74751 | *Australian Primary Teachers' Beliefs and Practices About Teaching Writing to Economically Disadvantaged Students*  
Clarence Ng, Australian Catholic University, Australia

The current study examined writing beliefs and practices of 187 grades 4 to 6 teachers who taught writing in schools serving predominantly low SES students in Queensland, Australia. These participants completed a mailed survey that assessed their perceptions of preparation to teach writing to low SES students, time spent on writing instruction, frequency of writing instruction, students' time spent on writing, efficacy beliefs for teaching writing, beliefs about these students' cognitive attributes for successful writing, beliefs about the suitability of basic writing instruction for low SES students, frequency of teaching basic writing skills and frequency of teaching advanced writing skills. As predicted, these teachers did not feel that they were prepared adequately to teach writing to low SES students. Neither did they consider in-service support sufficient. These teachers spent limited time on teaching writing, with a majority (81%) spending 1 or 2 hours or less teaching writing each week. Most teachers held deficit beliefs about low SES students, considering them lacking cognitive and motivational attributes for successful writing. Most also considered basic writing instruction appropriate for low SES students. As expected, most teachers taught basic writing skills more often than advanced writing skills. The results of multiple regression analyses showed that teachers' efficacy beliefs predicted frequency of teaching basic and advanced skills and moderated the effects of other teacher beliefs on how often basic writing skills were taught to low SES students.

11:45-12:10

73336 | *Our Journey through the Design and Implementation of a Writing Diagnostic Assessment*  
Laura Taylor, University of Toronto, Canada

Writing is hard, and it is harder for some students than others. Certainly, writing seems to have been made easier by programs such as ChatGPT and other artificial intelligence software, but there are some cases where authentic writing is essential, like in the university context where academic integrity and originality are necessary components. Moreover, it is important that students are able to successfully communicate through writing and that they understand how writing 'works' before entering employment. Our university requires that first-year students take a half-year writing course before entering their program of study. To be granted access to this course, students take an in-class written diagnostic in the first class of the term. Based on the results from the diagnostic, students either pass or fail. If they pass the diagnostic, they remain enrolled in the writing class; if they fail, they are removed from the class and asked to complete a non-credit foundational writing class before they re-enroll in a future iteration of the writing course. In order to determine the threshold to pass, a diagnostic assessment needed to be designed in a way that was fair for all students. This presentation outlines the design process of creating a writing diagnostic test, outlining the successes and challenges along the way. It would be particularly valuable to anyone interested in writing assessment more generally or to those seeking to implement a diagnostic assessment in their classes.



14:45-16:00 | Room 608

# Friday Onsite Presentation Session 4

Teaching Experiences, Pedagogy, Practice & Praxis

**Session Chair: Alan Meek**

**14:45-15:10**

75212 | *Positive Education, Spiritual Cultivation, and Self-Efficacy – A Case Study of One High School in Taiwan*  
Yu-lin Fan, National Tsing Hua University, Taiwan

In the past decade, the suicide rate among Taiwanese adolescents has been increasing year by year. As a response, Taiwan's education system introduced a new curriculum in 2019, with a specific emphasis on the implementation of positive education and spiritual cultivation. Therefore, the primary objective of this research is to investigate the implementation of positive education and spiritual cultivation in the selected case study school. The case study school is a boarding school. The researcher conducted interviews with the school's academic director, department heads, teachers, and students. Regarding the curriculum design, the school schedules one meditation class and two calligraphy classes per week, along with two life education classes, as part of their spiritual cultivation program. These activities aim to guide students in cultivating inner stillness, contemplation, and self-awareness. Based on the interviews conducted in this study, it was found that the teachers and administrative staff at the school are adept at employing positive education strategies in classroom management. They guide students to engage in positive thinking and provide counseling to help them strengthen positive emotions, enabling them to face setbacks and challenges more effectively. The students, in turn, benefit from courses such as meditation, calligraphy, and life education, where they practice activities like sitting in stillness, writing, and rhythmic breathing exercises. These activities facilitate emotional grounding and self-awareness, leading to a significant improvement in positive emotions and learning focus, enhancing self-efficacy to overcome obstacles and setbacks encountered during the learning process.

**15:10-15:35**

75918 | *Balancing Curriculum Standards and High-Stakes Examination in China: Comparative Research on Instruction Between Shadow Education and Mainstream Education*  
Weilin Wang, University of Hong Kong, Hong Kong

Education is widely recognized as a ladder for upward social mobility in Chinese society, which fuels the Chinese enthusiasm for education, including both mainstream education and shadow education. Private tutoring mimics and supplements mainstream education, thus making the instruction of private tutors in the shadow education context function as a bridge with public school teachers in mainstream education. Instructors always struggle to reach a balance between curriculum standards and high-stakes assessments. China MOE requires schools and teachers unquestioned obedience to the curriculum standards, while the high-stakes assessment has a washback, which leads to measurement-driven instruction. In order to better understand this phenomenon, I construct the Instruction-Balance Model, which originated from Osgood-Schramm's model in the field of communication, to discuss how an instructor qualifies to hold the roles including a decoder, interpreter, and encoder. This mixed-methods study is a multi-phase study. Each phase analysis is for each role the instructor plays. In terms of theoretical contributions, this study introduces and contextualizes Osgood-Schramm's communication model to shadow education research. In terms of practical contributions, this study benefits the relevant stakeholders, including tutors, teachers, students, curriculum designers, and high-stakes examination item writers. In terms of methodological contributions, this study revises the SEC alignment model and Flanders interactive analysis system (FIAS) to match the theoretical framework and it even adds in content analysis to supplement the FIAS which neglects the teaching materials.

**15:35-16:00**

75428 | *Exploring Dynamics of Intrinsic and Extrinsic Motivation: Insights from a Sino-British University Study*  
Alan Meek, Xi'an Jiatong Liverpool University, China

In today's dynamic Higher Education landscape, characterized by self-directed learning models like flipped and blended approaches, nurturing student engagement with asynchronous learning resources has gained prominence. While intrinsic motivation traditionally takes the limelight in discussions on student drive, our investigation within a Sino-British university's foundation year context in China reveals a more nuanced interplay. This study examines the interplay between intrinsic and extrinsic motivational approaches used by educators, revealing catalysts that influence student action. Focused on student interaction with online asynchronous learning materials, our research employs a two-phase action research cycle, analyzing the immediate and enduring effects of motivational interventions by teachers. Combining quantitative and qualitative methods, we study the experiences of 80 foundation year students, highlighting the effectiveness of extrinsic motivation and the significance of understanding students' prior educational paths. This nuanced understanding guides the tailoring of strategies that enhance engagement and facilitate adaptation to new learning environments. Our study offers a pedagogical guide for educators, demonstrating how a nuanced grasp of student experiences informs the modification of pedagogical approaches, enabling students to readily embrace asynchronous materials and enhancing the success of modern learning methods.

09:00-10:40 | Room 701

# Friday Onsite Presentation Session 1

## Curriculum Design & Development

### Session Chair: Surendra Shrestha

09:00-09:25

75313 | *Incentivizing Future Educators to Be Prepared for Cultural and Linguistic Diversity Through Curriculum Development*

Jingzi Huang, University of Northern Colorado, United States

Deborah Romero, University of Northern Colorado, United States

Like many countries in today's world, the US is facing a severe shortage of teachers while K-12 classrooms are experiencing continuing increase of culturally and linguistically diverse (CLD) student populations. Schools are desperate to find teachers with the CLD education competence. Facing the reality that there is a 30% decrease of people completing education degrees in the last decade, how do we creatively incentivize college students into education programs through curriculum design and development? This paper will describe and reflect on an effort in relation to its success and challenges to address the question. The study is based on a curriculum effort initiated by the faculty and supported by the university in the mountain region of the US. Specifically, the project is to create Pathways to Success for Undergraduate teacher candidates through Recruitment, Retention, and Graduate Success through a Dual Degree (4+1) program that would offer candidates three credentials in five years: elementary teaching license, CLD Education Endorsement, and a master's degree in teaching. It is action research which enables the faculty researchers to explore strategies during action for solving a real-world problem. Data includes university documents, project related documents, records of meetings with different entities or stake holders, student survey, curriculum design, and student responses to the process of the curriculum implementation. Data collection started Fall 2022 and continues. While we are in the preliminary stages of our effort, initial results offer lessons that shed light for all interested in a similar effort.

09:25-09:50

75826 | *Adapting to the New Normal in Education: Investigating the Readiness and Attitudes of Teachers Using Blended Learning Approach*

Rachel Kim Aure, Visayas State University, Philippines

Lijueraj Cuadra, Visayas State University, Philippines

Jeffrey Lloyd Cagande, Visayas State University, Philippines

At the start of the global health pandemic, education sectors and other government agencies were taking the lead to mitigate the spread of the virus and ensure the delivery of quality education to students. One way to address this concern is by investigating the readiness and attitude of teachers to integrate a blended learning (BL) approach and modify the curriculum. The study utilized an explanatory-sequential design employing a standardized survey questionnaire for teachers with a Cronbach Alpha (0.961). A focus-group discussion was also employed for triangulation purposes. Respondents were determined through cluster-random sampling within Region VIII to 303 teachers with an ethics review board approval protocol number(2022-009). The results showed that teachers are ready (4.0) for BL regarding disposition, online integration, data practices, personalizing instruction, and online interaction. However, across the demographic profile towards attitudes of BL, faculty with PhDs ( $p=0.001$ ), number of years in teaching ( $p=0.019$ ), and females ( $p=0.022$ ) have a more positive attitude towards BL approach than males. The relationship of BL to the demographic profile revealed that educational attainment ( $p=0.021$ ) and number of years ( $p=0.006$ ) in teaching are closely related to the attitudes towards BL. In addition, there is no significant relationship between the demographic profile and teachers' readiness. Moreover, these results can contribute to the post-COVID recovery in education and guide the making of a blended learning curriculum and the corresponding IRR to set standards to be followed. With its implementation, it is hoped that this will further ensure effectiveness and no wastage of resources.

09:50-10:15

74447 | *Human Resource Profiling for Post-pandemic Curriculum Reconfiguration in Higher Education*

Jason Chavez, Zamboanga Peninsula Polytechnic State University, Philippines

Marti Gregorio, Zamboanga Peninsula Polytechnic State University, Philippines

Jo Mark Libre, Commission on Higher Education, Philippines

Nelson Cabral, Zamboanga Peninsula Polytechnic State University, Philippines

National governments and academic higher education institutions continue to realign human resource development (HRD) strategies to address the gaps in HRD mandate. This study will investigate new and recalibrated skills should higher institutions (HEIs) professionals and the labor force produce to reconfigure curriculum development in tertiary education. The study extracts narratives from 6 curriculum developers, 3 HRD heads, and 3 manpower organizations on the labor landscapes from different local and multinational industries from entry-level to mid-career ranges through case scenario-based interviews and focus group discussions to determine the skills around motivation, innovativeness, and adaptability and subsequently integrate strategic initiatives to reconfigure the compatibility of these skills from higher education institutions to post-pandemic industries. The findings reveal skills that can be managed at the individual level e.g., self-motivation and adaptability as well as the need to emerge from the technological pressures by adapting to organizational and clientele demands. These human resource traits become the mantra of surviving and progressing in a landscape shaped by the pre- and post-pandemic setting and become the basis of HEI programs to match the needs of the labor force and the industries.

10:15-10:40

72930 | *Curriculum Co-Design with Industry Partners: Lessons Learnt*

Surendra Shrestha, Western Sydney University, Australia

Today's industry is demanding graduates who are job ready and able to perform professional tasks from day one. This has presented unprecedented challenges to the universities as these institutions are the ones responsible for preparing students for the job market. To address this challenge, the School of Engineering, Design and Built Environment (SoEDBE) at Western Sydney University (WSU) has developed a Job-Ready Graduates program where industry partners are brought in to co-design the engineering curriculum. The program began in 2022 and is in its second year. Two phases have been completed and the third phase has just started. Different strategies were used for different phases. Learning from the first phase was used to develop strategies for the second phase and the lessons learnt from the second phase was used to develop implement strategies for the third phase. Various methods were used to attract industry partners to collaborate with academics. This paper will present the core principles used in co-designing the curriculum. Lessons learnt from the experience and success achieved will also be presented.

10:55-12:10 | Room 701

# Friday Onsite Presentation Session 2

Teaching Experiences, Pedagogy, Practice & Praxis

**Session Chair: Jason Chavez**

10:55-11:20

74472 | *Emotion Suppression Among Ultra-Orthodox Female Teachers*

Izhar Oplatka, Tel Aviv University, Israel

Riki Vertaimer, Tel Aviv University, Israel

Purpose: The current study explored the process of emotion regulation among Ultra-Orthodox female teachers in Jewish educational system in Israel. The study posed two questions: (1) What kinds of emotions do Ultra-Orthodox female teachers suppress in these interactions? (2) What are the cultural and social factors affecting the female teachers' emotion regulation? Conceptual framework: Each occupation has patterns of emotional display and suppression that are somewhat distinctive, and teaching is no exception. Emotion regulation may be defined as "the process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross, 1999, p. 275). Method: Semi-structured interviews with 13 Ultra-Orthodox female teachers in single-sex education for girls. The teachers had held teaching positions for four to 30 years and represent a heterogeneous group in terms of subject matter, geographical location, and level of education. Findings: It was found that the teachers preferred to suppress their positive and negative emotions rather than displaying them in their interactions with students, emphasizing the importance of self-restraint and self-control in their professional work. Their patterns of emotion regulation are tightly entwined within the culture of the Ultra-Orthodox society in which emotional distance is considered the proper way to behave in the public sphere. Value: Findings may increase our understanding of contextual influences on teachers' emotion regulation. They shed light on the ways in which female teachers balance their personal feelings with emotional rules in the religious society in which they live and work.

11:20-11:45

74418 | *Gender Mainstreaming Campaign as a Casualty of the Online Disruptors and Other Gender-Based Humors: A Discourse Analysis and Deconstruction Through Education*

Jason Chavez, Zamboanga Peninsula Polytechnic State University, Philippines

The cultivation of gender-based humors in social media rise new questions on how to deconstruct explicit language use that reinforces discriminatory undertone. With strong discriminatory culture, language is a powerful tool that hampers how people perceived gender and development efforts in social media. This research study investigated the detrimental impacts of gender-based humor in social media on gender mainstreaming campaigns. There were 28 language teachers and GAD advocates who participated in focus group discussion and individual interviews. Discourse analysis shed light on the linguistic mechanisms through which gender-based humor perpetuates stereotypes, reinforces gender biases, and hampers progress towards gender mainstreaming. The findings of the study emphasized the crucial role of language teaching in enhancing gender mainstreaming efforts. Integrating gender-sensitive pedagogies into educational curricula to foster gender consciousness, analytical reasoning, and conscientious language use could disable explicit discrimination in gender. By fostering a deeper understanding on the power dynamics embedded in language, educational institutions can empower learners to challenge and deconstruct gender-based humor. Through linguistic education, individuals can develop the skills to recognize and dismantle harmful stereotypes, ultimately fostering a more inclusive and equitable community.

11:45-12:10

75891 | *The Impact of Gender and Inclusive Pedagogies (GIP) on Students' Participation and Learning Achievement at Secondary Schools*

Mohammad Ali Zinnah, University of Dhaka, Bangladesh

M Wahiduzzaman, University of Dhaka, Bangladesh

An international collaborative research project has been implementing in five-country contexts since May 2021 with the funding support of the International Development Research Centre (IDRC) to uncover impact of Gender and Inclusive Pedagogies (GIP) on students' participation and learning achievement at secondary schools during the pandemic and beyond. This paper presents mainly 20 head teachers' observed changes as an outcome of GIP practices by a selected number of subject teachers who teach Mother Language, Science, Social Studies and Mathematics at grades VII and IX in 20 experimental secondary schools in Bangladesh. Data collected from those head teachers in July 2023 by using semi-structured interview guide were analyzed following six steps data analysis process offered by Clarke and Braun (2013). The major findings revealed all head teachers' recognition of visible changes in subject teachers' attitude towards practice of GIP focusing on gender-friendly and participatory teaching-learning process and considering student characteristics and learning difficulties including the students with special needs. In addition, their frequent practice of GIP instead of conventional teaching-learning has increased attendance of irregular students in classrooms; reduced inhibition and isolation tendency between boys and girl students to great extent; enhanced respect and cooperation to each other; extended support to classmates with special needs; and increased their learning interests and achievements significantly. The findings imply the importance of GIP practice by the teachers in the broader context of secondary education level in Bangladesh. The major recommendations suggest the project team's scaling up initiatives to convince the policy and decision-making stakeholders.

12:50-14:30 | Room 701

# Friday Onsite Presentation Session 3

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: James W. McNally

12:50-13:15

75083 | *Teachers and Students' Perspectives in Current State, Problems and Needs of Multicultural Learning in Malayu Language*

Communication in the Southernmost Region of Thailand

Jirutthitikan Pimvichai, Mahidol University, Thailand

Norsaleeha Chemi, Narathiwat School, Thailand

This research aimed to explore the teachers and students' perspectives in current state, problems and needs of multicultural learning in the Malayu language communication subject at the secondary in Narathiwat province. Data was collected by the questionnaires from 33 secondary school teachers and 36 students under of the Narathiwat Secondary Educational Service Area Office. Data was analyzed by mean and standard deviation (SD). The results indicated that, in overall, teachers held a high level of opinions regarding the current state (mean = 3.69, SD = 0.63), moderate level of opinions regarding the problems (mean = 2.89, SD = 0.73) and high level of opinions regarding the needs (mean = 4.14, SD = 0.79) of multicultural learning in the Malayu language communication. In addition, in overall, students held a high level of opinions regarding the current state (mean = 4.03, SD = 0.68), moderate level of opinions regarding the problems (mean = 2.90, SD = 0.73) and high level of opinions regarding the needs (mean = 3.85, SD = 0.75) of multicultural learning in the Malayu language communication. The teachers and students held the perspectives in current state, problems and needs of multicultural learning in the Malayu language communication in the same direction.

13:15-13:40

74054 | *Challenges of Teaching Abroad: Willingness to Modify Pedagogical Practices that Accommodate Intercultural Differences to Facilitate Student Engagement and Learning*

Ganga Vadavkar, University of Wisconsin-Eau Claire, United States

Education, in any culture, context, or discipline involves varying degrees of communication between teacher and student. Language, whether written or oral, is typically the traditional medium of communication in the teaching and learning process. However, teaching abroad in a foreign country, challenges even years of teaching experience, pedagogy, practice, and praxis. This study examines the evolving process of pedagogical modifications made to a well-planned curriculum design to accommodate intercultural differences between teacher and students. It also addresses the changes affected in teaching strategies to address students' limited writing and speaking abilities in English language, which is the language of instruction and learning. The study used qualitative methods to collect data from both, the teaching perspective, and the learning perspective. The teaching method was in-person class sessions focused on applied, hands-on, interactive, and interdisciplinary approach. The personal, teaching experience of the visiting, international faculty used autoethnography, a qualitative, self-reporting research method to record first-hand experience of being embedded in a classroom in a foreign country as an educator. The professor recorded the necessary changes made to the coursework, style of teaching, and created lesson plans and instructions for students in dual languages (English and the native language) to accommodate language challenges, and intercultural differences in expectations and teaching-learning methods. This case study has implications for intercultural pedagogy.

13:40-14:05

75710 | *Digital Media and Participatory Culture: Pedagogical Implications for Teaching and Learning*

Jianglong Wang, Western Washington University, United States

The era of digital media has come to create a youthful and pervasive participatory culture featuring different forms of affiliation, expression, problem-solving and information circulation among its members. The generation of digital media savvy individuals has now populated classrooms all over our college and university campuses. Concomitant with their arrival to the campus are the inevitable challenges for educators to instruct effectively members of this newly created powerful participatory culture. From the perspective of intercultural communication and based on research in cultural adaptation and teaching innovation, this paper examines (1) salient features of the current participatory culture; (2) primary characteristics of the digital media generation; (3) major components of cultural competence for educators teaching this digital media generation; and (4) specific relevant and applicable pedagogical strategies for educators to enhance their teaching effectiveness and students' learning outcome in their classrooms. Impact of participatory culture on teaching effectiveness is further analyzed and implications for educators' adaptation and teaching innovation are also explored and discussed.

14:05-14:30

75641 | *The Opportunities and Dangers of "AI" Facilitated Writing in the Classroom: One Too Many Bites of the Apple*

James W. McNally, University of Michigan, United States

The foundational principles of AI have a history spanning over six decades. Initially introduced by Lotfi Zadeh, the concept proposed a departure from conventional Boolean logic towards a more versatile distribution-based approach for information processing. Zadeh coined the term "fuzzy logic" to describe this unconventional perspective. Consider the classic inquiry, "At what point in eating an apple does it cease being an apple?" This concept embodies the essence of fuzzy logic, describing how to measure the distributional transformation of an object into something different. The early stages of AI encountered limitations in grappling with vast quantities of information and rendering it shareable within the community. However, this landscape has dramatically evolved, especially in the realm of education. Overshadowing well-known grammar tools like Ginger and Grammarly, newer competitors such as ChatGPT are emerging as a way to bypass the creative process and quickly generate output based on information scrapped from the internet. These advanced tools hold the allure of generating original content, offering respite from tedious tasks such as writing. This presentation will place AI and its current impact on education within a historical context, defining what AI is, its potential legitimate uses, and its potential pitfalls and dangers. The presentation discusses best practices for legitimately integrating these emerging tools into education and research while identifying potential dangers to careers and reputations through misuse.

14:45-16:00 | Room 701

# Friday Onsite Presentation Session 4

Teaching Experiences, Pedagogy, Practice & Praxis

**Session Chair: James W. McNally**

**14:45-15:10**

75634 | *Pre-Service Chemistry Teachers' Experiences and Attitudes Towards Teaching and Learning Chemical Equilibrium Using WhatsApp*

Elaosi Vhurumuku, University of Witwatersrand, South Africa

This paper reports the results from a study that investigated the experiences and attitudes of pre-service Chemistry teachers towards teaching and learning chemical equilibrium using WhatsApp. The participants were a hundred and twenty-five (n=120) 3rd-year Physical Science pre-service teachers, enrolled in a four-year Bachelor of Education Degree program. Teaching and learning of Chemical equilibrium through WhatsApp were conducted over a four-week period through posting a digital image of chemical equilibrium slides created using a mobile camera or downloaded from YouTube and other platforms; providing students with links to websites on chemical equilibrium; posting assignments, study questions and tutorial tasks; and group chats and discussions of concepts and answering students' questions. Data was collected using a questionnaire and doing a content analysis of students' WhatsApp chats. The results show that while the pre-service teachers identified challenges and problems from their experiences, they generally had positive attitudes towards the teaching and learning of chemical equilibrium using WhatsApp. Recommendations for the practice and research in chemical education are teased out and interrogated.

**15:10-15:35**

70111 | *Continuity of Learning Through TBM: Technology-based Modalities During and After Pandemic*

Paulo Mangubos, Schools Division Office of Santa Rosa City (DepEd), Philippines

The COVID-19 pandemic is definitely a health issue that has affected much of the sectors in the community, especially in the education sector. As a city, Santa Rosa is still being affected by this pandemic. The severe disruption has been felt by all families and has greatly affected the education system in the entire city. The crisis crystalizes the dilemma being faced regarding the opening of classes, reducing contact and saving lives, and keeping schools opened within the usual opening as provided by law. As a continuing commitment, SDO Santa Rosa City has never been hindered by the present challenges brought by the COVID-19 pandemic, different calamities, and problems that need to be addressed appropriately. As mentioned by Martin Luther King, "The function of education is to teach one to think intensively and to think critically. Intelligence plus character – that is the goal of true education," which necessitates the division to work more productively and make everyone responsible for quality education that every learner deserves. Hence, education has never stopped during and after the pandemic. In this regard, this research aimed to investigate the issues and challenges in technology-based learning modality in the select schools of Santa Rosa City during and after the pandemic through the eyes of the learners for the development of strategic actions for learning continuity.

**15:35-16:00**

73619 | *A Social Support Account of How Working from Home Undermines Teaching Effectiveness and Heightens Teacher Strain*

Noriko Tan, National University of Singapore, Singapore

Jingxian Yao, Singapore University of Social Sciences, Singapore

Online teaching became a widespread and sometimes necessary approach during the COVID-19 pandemic. Even in today's post-pandemic era, online teaching continues to be a popular alternative to in-person instruction, offering teachers and students flexibility and convenience. In this research, however, we demonstrate the downsides of online teaching from a social support perspective. We argue that, when teachers work from home and deliver courses online, they receive less support from colleagues. This is largely because the lack of shared workspace and face-to-face interactions create barriers to support seeking and giving. At the same time, work-from-home teachers receive less support from their spouses, with the spouse legitimizing more family responsibilities for teachers based on the physical proximity of being at home. Lower levels of coworker and family support, in turn, undermine teaching effectiveness and heighten teacher strain, as work-from-home teachers miss opportunities to obtain instrumental help and become distracted by household chores. We furthermore investigate how relational dynamics with social support sources (i.e., colleagues and the spouse), reflected by team-member exchange and information sharing with the spouse, play a role in the above processes, positing that the detrimental impact of online teaching is less pronounced when teachers' relational dynamics with social support sources are more positive. A field experiment with a sample of 122 university lecturers who were randomly assigned to either the online teaching or the in-person teaching condition (with online teachers working from home and in-person teachers working at the office) provided support for our hypotheses.

09:00-10:40 | Room 703

# Friday Onsite Presentation Session 1

Adult, Lifelong & Distance Learning

**Session Chair: Pulane Molomo**

**09:00-09:25**

74248 | *Exploring the Role and Function of Religious Volunteers in a University Comprehensive Guidance Program*  
Ting-Ying Lo, Tzu Chi University, Taiwan

Tzu Chi University is a religious university that has established a unique three-track mentoring system in collaboration with tutors system, the Tzu Cheng/Yi De association, and counseling centers. This study examined the role and function of religious volunteers regarding two elements of the comprehensive guidance program: system support and individual student planning. This study applied a case study method and recruited 8 female religious volunteers as interviewees. Participants have worked in the Tzu Cheng/Yi De association for 5 to 27 years. Their average ages are between 60 to 70 years. They were interviewed one or three times for one to three hours each time. I conducted a thematic analysis of the interview data. The findings indicate that in terms of system support, the religious volunteers played the following roles and functions: 1. Integrator: They integrated a network of students, schools, and parents and closely collaborated within the two-track system. 2. Community resource giver: They offered economic resources and care to students, parents, and university staff. 3. Mediator: They engaged in university activities as a bridge between students and the school. Regarding individual student guidance programs, the role and functions were as follows. 1. Referrer: They observed student needs, focusing on preventive and developmental level to offer and refer to two-track system staff. 2. Planner: They designed informal reunions to encourage positive relationship-building with students. 3. Career teacher: They conveyed the importance of work attitude before employment.

**09:25-09:50**

73841 | *Exploring Experiences of Non-traditional Adult Learners in Part-Time Doctoral Programs*  
Jinhee Choi, aSSIST University, South Korea

This research study aims to investigate the experiences of non-traditional adult learners enrolled in part-time doctoral programs, with a specific focus on professional doctoral students in the Republic of Korea. As the demand for upskilling, reskilling, and retraining grows in the era of digital transformation, an increasing number of adults are seeking doctoral education to develop insights into unprecedented complexity. However, little is known about how these middle-aged doctoral students navigate their school life while managing work and home responsibilities. This study utilizes qualitative methods, including semi-structured interviews with twenty-five professional adult learners enrolled in a part-time management doctoral program, conducted between February and July 2023. Thematic analysis is employed to explore the participants' needs, desires, difficulties, and aspirations. By understanding their experiences, challenges, and insights, this research aims to contribute to the existing literature on adult learning, specifically focusing on non-traditional and professional doctoral students. The findings of this study will inform the design of educational interventions and support systems tailored to meet the unique needs of professional adult learners pursuing part-time doctoral programs.

**09:50-10:15**

75774 | *Educating Communities for Survival: Building, Resilience, Sustainability and a Healthy Society*  
Pulane Molomo, Central University of Technology, South Africa

Complexities and challenges in the world are bringing communities to the brink of collapse. This paper explores how social learning and education can instill desirable traits for communities to take charge of their situation. The aim is to sustain communities through education and social learning to help them to develop desirable traits. Qualitative data was generated from literature, two case studies and a purposively sampled respondent group of six lecturers and twelve students in a South African university, using interviews and focus group discussions. Data was categorised and analysed into themes. It was found that education lays the foundation for knowledge and skills which is replicated through social learning, by developing sustainability and self-efficacy principles. The study is underpinned by Bandura's theory of self-efficacy essential for building motivation, self-belief, and self-regulation essential for people to change from self-defeating tendencies. This study proposes ongoing partnership and engagement between higher education and communities to, restore communities with the implication of bringing change and sustainability. The implication is that government is unable to curb the increasing population and to cater for people's increased needs. It is concluded that social learning and education have the power to bring positive results, make people to believe in themselves, and adopt sustainable virtues that enables resilience, and the creation of a healthy society.

**10:15-10:40**

74869 | *Empowering the Selected Geographically Isolated and Disadvantaged Area (GIDA) Populace Through Sustainable Soap-Making*  
Edna Nabua, Mindanao State University-Iligan Institute of Technology, Philippines

This study investigates the influence of a soap-making training design on the Geographically Isolated and Disadvantaged Area (GIDA) of Barangay Digkilaan in Iligan City, Philippines, focusing on the demographic profile of the participants and their attitudes towards organic chemistry-based soap-making. Thirty (30) residents of the said GIDA were identified as participants through purposive sampling with specific inclusion criteria. Soap-making training was designed and these thirty(30) participants attended the one-day soap-making training workshop. The majority of the participants are female, with a notable representation of young adults. The level of education among the respondents is predominantly high school, while household incomes tend to be relatively low. Agriculture, particularly farming, serves as the primary source of income for the community. The evaluation of the soap-making training program demonstrates a significant improvement in participants' knowledge and attitudes towards organic chemistry-based soap-making. Initially, the participants had limited knowledge and experience in soap-making which was substantially enhanced after the program. The participants exhibited high levels of interest and expressed a desire to apply their newfound skills in their daily lives. Based on the findings, several recommendations are proposed to further support the development of organic chemistry-based soap-making as a sustainable livelihood option in the GIDA. These include the promotion of livelihood opportunities in organic soap-making, providing access to additional education and training programs, and implementing ongoing support mechanisms for the community's sustainable development. The community may capitalize on the potential of organic chemistry-based soap-making to foster sustainable livelihoods and to improve the overall well-being of residents in Barangay Digkilaan.

10:55-12:35 | Room 703

# Friday Onsite Presentation Session 2

Adult, Lifelong & Distance Learning

Session Chair: Marie Martin

10:55-11:20

75807 | *Embedding a Student-Centric e-Academic Peer Learning Support Programme in a Distance Learning Ecosystem at the North-West University*

Nomasomi Morule, North-West University, South Africa

Sonja Van der Westhuizen, North-West University, South Africa

Government initiatives aim to expand access to education in South Africa through Open Distance Education, addressing historical inequalities. Yet, high dropout rates among distance learning (DL) students persist. North-West University (NWU), a medium sized, traditional higher education institution in South Africa, recognizes that simply providing e-learning access isn't enough for success. Beyond academics, factors like belonging and social integration impact student achievement, aligned with Tinto's Model of Student Integration. Research underscores the significance of online support services for DL students, who require equitable access to all on-campus services. Paradoxically, lack of institutional support contributes to DL student dropout, revealing a gap in online services. While DL courses expanded access, support services didn't fully adapt, leaving unprepared students with minimal resources. To bridge this gap, NWU's Centre for Teaching and Learning (CTL) promotes a student-centric approach to distance learning student support. This paper addresses DL students' concerns regarding NWU's support services, identified in a 2021 study. It: a.) outlines DL students' concerns—lack of respect, recognition, support, and opportunities for peer interaction, b.) defines CTL's student-centric principles, and c.) proposes a three-year plan for a student-centric e-academic peer learning peer support programme at NWU. The paper concludes that prioritizing DL students' needs and aspirations is key. By implementing evidence-based strategies, NWU can cultivate a supportive learning environment that enhances retention, academic achievement, engagement, well-being, and a sense of belonging among DL students.

11:20-11:45

75486 | *Learning Personas in Online Distance Learning (ODL): An Analysis of the Motivations, Perceptions and Strategies of ODL Students*

Eamon Vale, Macquarie University, Australia

Geetha Nadarajan, Sunway University, Malaysia

With the surge in online distance learning, there's a presumption that new doors have been opened for student demographics that were previously excluded from higher education. This assumption revolves around a specific learner persona – adult learners, often parents or caregivers, working professionals, or those geographically isolated, who now have the chance to reconnect with higher education through online platforms. However, these assumptions are rarely tested and might not accurately reflect the actual demographics or motivations of online distance learners. In 2022, Sunway University introduced an entirely online accelerated MBA program, offering an opportunity to interrogate some of these assumptions about learner personas and gain a deeper insight into the student experience of online learning. To achieve this, semi-structured interviews were carried out with students enrolled in Sunway University's Online MBA program. Participants were encouraged to describe their own learning personas and share the driving forces behind their decision to enroll in an online distance learning MBA program. The qualitative data from these interviews underwent thematic analysis, shedding light on student perceptions of online learning and whether they perceived any shifts in their learning approaches as adults returning to education while juggling various personal and professional obligations. By conducting research into student learner personas, motivations, and strategies for online learning, this study aims to offer valuable insights for higher education institutions seeking to cater to the needs of an emerging and expanding student cohort.

11:45-12:10

73109 | *Code Switching Analysis: English Memes Reaction Video as the Supplemental Resources for Indonesian EFL Learners*

Amelia Kartikawati, Ganesha University of Education, Indonesia

In Indonesia, most English communication still happens in classroom settings. It leads to ineffective English language learning for students. In order to be proficient in English, students need to have supplemental resources without depending only on the teachers in school. The utilization of social media can be very helpful in English language learning. In Indonesia, Mr. D is a well-known English teaching influencer with Instagram account and Youtube channel of gurukumrd. One of his Youtube contents is English meme reaction. The use of memes is quite new for English teaching in Indonesia. His videos teach English grammar clarity, word choices, and cultural opinion in a humorous way. This study analyzed code switching types used by Mr. D on the meme reaction video. The use of code switching in educational settings is a common thing. Wardhaugh's theory was used to analyze the code switching types in the video. The types are divided into 2 (two), namely situational and metaphorical. The researcher used qualitative study based on content analysis. The results of the study showed that Mr. D used both types of code switching. The metaphorical (65%) is the dominant code switching type used by Mr. D, compared with the situation type (35%). The viewers showed positive attitudes (99%) towards the content through the comment box, making them more motivated to learn English. 1% showed a neutral attitude. In addition, the meme reaction could be a reference for English teachers in Indonesia to implement fun teaching in classroom settings.

12:10-12:35

76115 | *Shifting Institutional Logics Through a Multi-Campus Consortium: Continuing Education Division-Led Organizational Change of a U.S. University System*

Marie Martin, University of California, United States

This qualitative investigation uses institutional logics and organizational change theory as a lens to examine the ways in which the establishment and efforts of a multi-campus university consortium, focused on reengagement of adult learners for degree completion, have challenged dominant institutional logics and shifted organizational culture incrementally within a major research university system in the western United States. Through a critical analysis of documents (policies, websites, white papers, budgets, emails, speeches, symposium presentations, etc.), findings illuminate the ways in which auxiliary academic units (continuing and professional education divisions) – when working collaboratively as a community of practice – can act as catalysts for organizational change in higher education institutions with deeply embedded institutional logics. Implications for practice and future research are discussed with consideration for the potential applicability and transferability of findings in other education contexts internationally.

12:50-14:30 | Room 703

# Friday Onsite Presentation Session 3

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Zuokun Li

12:50-13:15

72984 | *Designing Blended Learning Experiences for Concept-Based Inquiry in the Economics Classroom*

Dai Hwee Tan, Ministry of Education, Singapore

Educators all over the world adopted online methods to teach during the COVID-19 pandemic and found distinct benefits of online learning (Gilbert, 2015). It offered students flexibility and an opportunity to be more directly involved in their own learning. With the resumption of in-person face-to-face lessons in schools, online learning is now combined with face-to-face lessons. However, many educators realize that blended learning experiences can end up fragmented (Dilger, Gommers & Rapp, 2019), shallow (Wang, Sun & Shi, 2018), and repetitive for students. How do we integrate online learning with face-to-face lessons in such a way that ensures a seamless, quality learning experience for our students? This presentation shares a lesson designed to help students acquire deep learning within a blended learning environment. The lesson adopts Marschall and French's (2018) Model of Concept-based Inquiry to guide students to form their own conceptual understanding of "Decision-making in Economics". It also applies Kerres and De Witt's (2003) didactical framework for blended learning to design inquiry activities that maximise the advantages of different modalities of learning. Finally, educational technology tools and platforms were used to bridge students' learning across time and space. All the students who participated in this lesson agreed that concept-based inquiry gave them a deeper understanding of decision-making. They also found this blended learning experience to be more engaging and interesting. These findings should provide useful insights for educators looking to design effective blended learning experiences.

13:15-13:40

76020 | *Science, Culture, and Islam: Exploring the Perspectives of Maranao Preservice Science Teachers on the Nature of Science and Science Education*

Norzeda Angagao, De La Salle University, Philippines

The education system in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM), located in the southern part of the Philippines, is distinct compared to the rest of the country, as it comprises both Islamic and secular education. The religious views of Muslim Maranao preservice science teachers, especially their beliefs on science and potential conflicts with scientific principles, can introduce a perceived contradiction that may affect their teaching and subsequently influence student learning outcomes. By surveying Maranao preservice science teachers, this study seeks to understand their perceptions of the intersections of Science, Culture, and Islam as well as their implications to science education. Using a quantitative research design, a survey was conducted among 92 Maranao preservice science teachers. The study also investigated the perspectives of these preservice teachers regarding the feasibility of an integrated Science-Islam curriculum in the BARMM region. Results revealed that the Maranao preservice science teachers held a positive perception of science, recognized the connections between science and culture, expressed favorable opinions regarding the integration of culture in science education, and demonstrated a positive perception of teaching and learning science. Furthermore, the majority of respondents expressed optimism regarding the potential for an integrated Science-Islam curriculum, underscoring the compatibility of Islamic concepts and scientific principles. To gain a more comprehensive understanding of the possibility of developing and implementing an integrated Science-Islam curriculum in the Philippines, future research should incorporate a larger population, encompassing in-service science teachers and Madrasah educators to collect a broader range of data.

13:40-14:05

74955 | *Implementing Sustainability and Resilience into the Undergraduate Engineering Curriculum*

Dazhi Yang, Boise State University, United States

Bhaskar Chittoori, Boise State University, United States

This study investigates faculty's use of instructional strategies for implementing resilience and sustainability into undergraduate engineering curricula, the most important aspects of and the most important applications of resilience and sustainability for students, and the challenges and issues associated with such implementation from different engineering disciplines. Results from the interviews with faculty showed that faculty used various instructional strategies to integrate resilience and sustainability into their existing curriculum. General discussions on the concepts, applying the principles of the concepts or project-based learning, and inviting experts as guest speakers, were the top three strategies used to introduce sustainability and resilience. Across disciplines, faculty members consider practicality, the triple bottom line principle, and liability and environmental issues to be the most important aspects of sustainability for their students. Similarly, faculty members consider resiliency and rapidity or time recovery to be the most important aspects of resilience for students. Time constraint on the faculty's side for implementing such concepts was the major challenge for implementing resilience and sustainability. In addition, packed curricula, struggles in finding the right strategy, students' lack of motivation to learn about the concepts, as well as difficulty in teaching such concepts in introductory courses are also identified as major challenges. This study provides insights into the successful implementation of resilience and sustainability into undergraduate engineering curricula for researchers and practitioners from multiple engineering disciplines. Future studies regarding the documentation of various instructional strategies and the applications of resilience and sustainability in different engineering disciplines are recommended.

14:05-14:30

75882 | *The Challenges in Designing Integrated STEM Lessons*

Emily Oon, University of Macau, Macau

Wanling Hu, University of Macau, Macau

Zuokun Li, University of Macau, Macau

The purpose of this study is to examine the performance of pre-service teachers in developing integrated STEM lesson plans based on the 5E model, as well as to identify the most challenging aspect of the process. A total of 41 pre-service teachers from an East Asian university were selected as participants. The study employed the 5E Inquiry Lesson Plan (ILP) rubric as an assessment tool to evaluate the pre-service teachers' ability to create effective 5E lesson plans. The collected data were analyzed using descriptive statistics and Epistemic Network Analysis (ENA). The findings revealed that pre-service teachers obtained the lowest scores in the Explain phase. Designing activities for the Explore, Elaborate, and Evaluate stages posed the greatest challenges for the participants. Specifically, they struggled with establishing connections between the Explore and Elaborate activities, determining appropriate content, and managing the activity difficulty level. The study's results initially confirmed that pre-service teachers were capable of developing high-quality 5E lesson plans following training. However, they tended to rely on teacher-centered instruction rather than student-centered approaches during the explanation stage, resulting in superficial explanations. Moreover, there was a lack of coherence and connectivity in the design of activities for the Explore and Elaborate phases, which made evaluation and assessment particularly challenging.

14:45-16:00 | Room 703

# Friday Onsite Presentation Session 4

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Huay Ling Tay

14:45-15:10

74931 | *Unveiling Science Research Teachers' Profiles: Impact on Instructional Practices*

Joanna Marie de Borja, Philippine Normal University & University of Cabuyao, Philippines

Allen Espinosa, Philippine Normal University, Philippines

Despite challenges such as infrastructure limitations, equipment constraints, inadequate training, and insufficient support, the ultimate goal of science research teachers (SRTs) is to ensure the development of quality scientific research projects among students. This research aims to understand the profiles of SRTs (research productivity, paper presentations, publications, research recognitions, faculty training, continuing education, and research teaching experience) and investigate how their perspectives influence instructional practices. Charmaz's Constructivist Grounded Theory (CGT) with ethnography was used to collect and analyze data. Selection criteria were used to ascertain that research teacher participants from Science, Technology, and Engineering (STE)-implementing schools were able to produce quality research outputs among students by having records of winnings in different science investigatory project (SIP) competitions and teaching research for five or more years. They were subjected to ethnographic interviews together with their school heads (SHs). There are a total of 16 SRTs and SHs participants. Pertinent documents and observations were also included in the initial stage of analysis and memoing. There were 29 initial codes that emerged, which were intercoded by two experts in qualitative studies, resulting in the identification of four focused codes or categories - competition-centered driven SRTs; SRTs as lifelong learners; SRTs as researchers and collaborators; and SRTs as facilitators of learning. This indicates that instructional practices and curriculum implementation are shaped through lifelong learning and competition-driven experiences of SRTs.

15:10-15:35

70850 | *Teachers' Response about National Assessment: How do Vocational Teachers Elaborate Literacy in Class*

Wahyudi Wahyudi, Yogyakarta State University, Indonesia

Heri Retnawati, Yogyakarta State University, Indonesia

Elly Arliani, Yogyakarta State University, Indonesia

In the era of the industrial revolution 4.0 directs to form the skills of the 21st century of students, so that teachers are expected to integrate these skills in learning. The role of teachers is very central because teachers are decisive in regulating the course of learning, but information on how teachers deliver literacy has not been widely obtained. Therefore, the information is required to be elaborated more deeply. The study aims to explore how teachers integrate literacy to learning. This study is phenomenology research. Participants of this study were 8 vocational school teachers for natural science subject in Indonesia. Data collection is conducted by depth interview. Data analysis is performed using the thematic analysis by combining help table (manual) and ATLAS.ti 22. The research result show that some teachers comprehend Minimum Competency Assessment (AKM) program which only focuses on literacy assessment, and character had not been mentioned. Majority of them had the same response that AKM has purpose for improving quality of education. The disparity of preparation for facing AKM is conducted by focusing on the learning in the class and infrastructure, especially computer and network. This is huge problems which was felt by participant in East Indonesia. For the last theme, each vocational teacher has their own experience for learning literacy in the school. Many ways are expressed by participants, and most of them taught student by adapting data in the learning process. The vocational teachers argue that this way could increase student's literacy.

15:35-16:00

74797 | *Integrating Action Research and Experiential Learning in Student Applied Research Projects*

Huay Ling Tay, Singapore University of Social Sciences, Singapore

Applied research projects are essential to students' academic journey, enabling them to gain hands-on experience, practical skills, and problem-solving abilities. Traditionally, these projects involve a more passive learning approach. Integrating action research and experiential learning can create a dynamic learning environment that fosters active participation and enhances students' understanding of their chosen fields. Action research is a collaborative inquiry process aiming to improve a situation by identifying problems, developing solutions, and implementing changes. It emphasises the researcher's active involvement and continuous reflection. Integrating action research into student-applied research projects helps them understand real-life considerations in decision-making. Further, Kolb's experiential learning suggests that learning is most effective through concrete experiences, reflective observation, abstract conceptualisation, and active experimentation. Students can develop critical thinking, problem-solving skills, and adaptability by incorporating experiential learning principles into applied research projects while bridging theory and practice. The study explores the effectiveness of using action research and experiential learning methodologies in student-applied research projects. Using the case-based research method, this study presents empirical evidence highlighting the benefits and potential challenges of operationalising action research and experiential learning pedagogy in these projects. The study found combining action research and experiential learning creates a mutually reinforcing learning process. The iterative nature of action research aligns well with Kolb's experiential learning cycle, as students continuously cycle through experiences, reflection, conceptualisation, and experimentation. Students can fine-tune their approach and deepen their understanding of the subject by constantly evaluating and adjusting their research strategies.

09:00-10:15 | Room 704

# Friday Onsite Presentation Session 1

Teaching Experiences, Pedagogy, Practice & Praxis (Panel Presentation)

09:00-10:15

75683 | *Generating and Mobilizing Knowledge and Innovation in Education: Findings of Three Applied Research Projects on Innovative Interventions Across Seven Countries*

Sangay Jamtsho, International Development Research Centre, India

Binayak Krishna Thapa, Kathmandu University, Nepal

Karma Jigyel, Paro College of Education, Bhutan

Mohammad Ali Zinnah, Dhaka University, Bangladesh

Aishath Nasheeda, Villa College, Maldives

Dorji Thinley, Royal University of Bhutan, Bhutan

Significant progress is needed to ensure inclusive and equitable quality education for all by 2030. We need more knowledge and evidence on how to scale effective initiatives that improve learning outcomes and understand why some interventions work better than others or show greater benefits in some contexts but not in others. For education systems to succeed, they need access to relevant evidence and the capacity to use available evidence to shape policies and practices. The Knowledge and Innovation Exchange (KIX) is a joint endeavour between the Global Partnership for Education and the International Development Research Centre that responds to these challenges. It funds applied research projects that generate knowledge, mobilize these to ensure they feed into national education policy and planning processes, and build capacity to address key educational challenges. This panel will present the findings of three such projects in seven countries in Asia.

*Effectiveness of Campaign Through Community Action Group and Extra-Curricular Activities on Students' Attendance, Participation and Absenteeism*

In Nepal a range of educational programs are being implemented for children not attending school and those at risk of dropping out. However, their effectiveness has not been fully understood. This study evaluated two interventions namely educational campaign and after-school programs/ extracurricular activities (ECA) to harness the evidence on what works and what does not work and the potentials for scaling their impact. It aimed to understand how these educational programs work, factors that determine their success, and effectiveness. The study was carried out in 18 public schools in three rural municipalities of Nepal using Randomized Controlled Trial. The study employed Difference-in-Differences (DID) technique to evaluate the impact of the interventions. The findings of the study revealed significant positive impacts from the interventions. The Campaign intervention, focusing on parental perceptions and involvement, resulted in a stronger sense of connection between parents and schools. Similarly, the ECA resulted in higher levels of student participation, enhanced academic performance, increased attendance rates, and a stronger emotional attachment to school. The findings emphasize the importance of investing in parental involvement initiatives and incorporating extracurricular activities to enhance students' educational experiences. Extracurricular activities play a crucial role in student development, but they need support from the school management and effective monitoring by education officers and local municipalities.

*Educational Innovations for Out of School Children and Youth with Disabilities and at Risk of Dropping Out*

It is estimated that only 12% children with disabilities in Bhutan of school going age (6-18 years) are currently enrolled in schools and special institutes. Those in schools face significant barriers in learning and completing school and are at risk of dropping out. This case study looked at innovative interventions to support Out-of-School Children and Youth with Disabilities and at risk of dropping out (OOSCYD) in Bhutan. Twenty children and youth (8-20 years) with disabilities and two at risk of dropping out in two Special Educational Needs (SEN) schools and two Civil Society Organization (CSO) centers participated in this study. They were assessed to identify appropriate intervention and services tailored to their needs and interests. Intervention included activities for daily living skills, pre-vocational skills, functional literacy, numeracy, information technology, behavior management, and arts; that were conducted three to four days a week. A mixed methods case study research design was used to investigate the efficacy of interventions implemented over a year. Data was collected using a survey, semi-structured interviews with parents, school principals and center managers, and observations. Results were very positive and showed marked improvements in daily living skills, pre-vocational aptitude, functional proficiency, and improved behavior among a significant portion of the participants despite the short duration of intervention. Furthermore, the collaborative nature of these initiatives has fostered collaboration and resource-sharing between schools and community-based organizations, strengthening the overall support ecosystem for OOSCYD.

*The Impact of Gender and Inclusive Pedagogies on Students' Participation and Learning Achievement at Secondary Schools*

This paper presents findings of a project on the impact of Gender and Inclusive Pedagogies (GIP) implemented across five countries (Bangladesh, Bhutan, Nepal, Timor-Leste and Vietnam). GIP is a co-designed approach based on evidence of good practices in four of these countries. The project explored changes in students' participation and learning achievement due to GIP implementation in secondary schools. The study used an experimental design with pre- and post-tests. The study was conducted in a total of 60 schools across five countries and also used similar number of schools in these countries as control group. A baseline study was conducted in both experimental and control schools prior to training of teachers in the experimental schools. Training manuals were developed, and training was provided in four tiers with gaps to allow implementation after each tier training. Additionally, school leaders from experimental schools were provided GIP related management and leadership training. An online study was conducted following the GIP intervention. Data was collected using a survey questionnaire, in-depth interviews of teachers, focus group discussion with students, and classroom observations using an observation checklist were collected from all schools. Results indicate improved attendance of irregular students, active participation in teaching-learning activities by all students - girls and boys including those with special needs, and significant progress in their learning achievement. The findings imply that using GIP approach in secondary school classroom can be an effective way to help 'all' children succeed but will require greater knowledge mobilization and capacity strengthening to benefit at greater scale.

*Mentoring an Agent for Change in Collaborative Action Research Process*

Teacher Professional Development (TPD) in South Asia has been mostly organised in the form of trainings and workshops. Often teachers find it difficult to implement innovative practices in the classroom due to lack of guidance and support from experienced and knowledgeable teachers within the school system. This was confirmed from the Landscape mapping study conducted on existing TPD practices of three South Asian Countries: Afghanistan, Maldives and Nepal. The study was part of a broader research on the intervention Multimodal Approach for Teacher Professional Development (MATPD) in low resource settings where capacity development opportunities to 45 South Asian Teacher Educator (SATE) Fellows across Afghanistan, Maldives and Nepal were provided through distance learning online courses and social learning opportunities from mentors and peers. The design of the intervention in MATPD involved the fellows to take on the role of a mentor as well as a mentee. In this paper we draw on participants' lived experiences of mentoring the teachers while conducting collaborative action research. A total of 45 participants from Afghanistan, Maldives and Nepal participated in conducting collaborative action research in their respective countries. One-on-one online interviews were conducted to understand the participants' experience of taking on a mentoring role for a collaborative action research. Findings revealed that the mentoring process can be an agent of change in helping teachers adopt new and innovative teaching practices. Mentoring as an element was found missing in establishing relationships in schools and in systems for teacher professional development in the South Asian countries.

10:55-12:35 | Room 704

# Friday Onsite Presentation Session 2

## Curriculum Design & Development

### Session Chair: Lerato Matshaka

10:55-11:20

73985 | *FinTech Education/Training Design and Implementation in Australian Universities*  
Pak-Lok Poon, Central Queensland University, Australia

Today, FinTech (Financial Technology) is a buzzword which refers to a set of new digital technologies (e.g., artificial intelligence, big data, blockchain, and smart contract) employed to improve and automate the delivery and use of financial services. Over the past decade, we have witnessed that many FinTech firms have been flooding into financial services markets, creating innovative disruptions to traditional, long-established financial institutions (e.g., banks and insurance companies). Indeed, FinTech has caused a global financial revolution that affects everyone's daily lives. In response to this FinTech wave, universities around the world (e.g., Harvard University, Stanford University, University of Cambridge, and University of Oxford) have started to offer their FinTech education/training to various extent. As Australia has been an early adopter of innovation and technology in the financial services industry, we performed a comparative study to investigate how Australian universities offer FinTech education/training to their graduates and the society at large. In our study, we first selected some Australian universities which are offering FinTech education/training. We then compared their offerings in various aspects such as the following: levels of offering (degree-level versus unit-level); hosting and offering schools (e.g., business or IT); entry requirements or study prerequisites; modes of study (e.g., on-campus, off-campus, or blended mode); learning outcomes; course structures and assessments; background of instructors (e.g., general business management, finance, accounting, or IT); FinTech topics covered; supporting laboratory (e.g., FinTech lab); professional short courses (e.g., FinTech boot camp); and industrial involvement.

11:20-11:45

71558 | *Proposing a Trauma-informed Curriculum Framework for Basic Science in Medical Education*  
Amitabha Basu, St. Matthews University School of Medicine, Cayman Islands  
Aurianna Acloque, St. Matthews University School of Medicine, Cayman Islands

Purpose: Evidence and personal experience informed us that students often fail classes, drop out of medical school, or act unprofessionally because of various childhood adversities. When dealing with these struggling students, schools provide them with counseling, ask them to withdraw from the curriculum, or, in an emergency, contact emergency medical services. I proposed to develop a framework of trauma-informed teaching in the basic medical sciences to help them excel in medical education without re-traumatization. Methods: We used the PICOS tool for a comprehensive search since resources were limited to finding evidence. The databases used were EBSCO for corporate psychology, ERIC for education/developmental psychology, Medline/CINAHL for health topics, and ProQuest for transdisciplinary literature. I evaluated titles and abstracts against the inclusion and exclusion criteria. Results: Various diversities (historical, racial, and disease) can prevent students from accomplishing their academic and professional goals. The curriculum should provide: 1. adequate scope for collaboration and student-peer-teacher partnerships, 2. inform teachers about psychological trauma and how it can affect students, 3. Move past cultural stereotypes and biases in the lecture materials and use newer evidence, 4. avoid cultural stereotypes and biases in the stem of the MCQs, and 5. develop self-regulation skills in students. Conclusion: Trauma-informed instruction must be introduced in the early phases of medical education to contribute to greater equality in medical education and prevent re-traumatization.

11:45-12:10

74799 | *Rethinking the Excessive Prerequisites in Engineering Curricula*  
Guilherme Temporao, Pontifical Catholic University of Rio de Janeiro, Brazil

In various fields of study, students often find themselves navigating a complex "prerequisite maze" as they endeavor to complete their programs on schedule. This phenomenon is particularly prevalent in Engineering curricula, where numerous courses not only build upon foundational physics and mathematics concepts acquired in previous semesters but also delve into advanced and specialized subjects. The prevailing rationale behind this practice is the notion of knowledge accumulation in layers, where higher-level comprehension relies on the establishment of a robust groundwork in the lower levels. In this research, we explore two instances within Engineering curricula where the imposition of prerequisites was scrutinized for its necessity. The first case pertains to a conventional mandatory course in the core of Electrical, Control, and Computer Engineering programs, namely "Electrical and Electronic Circuits I." Recently, this course underwent a revision that involved the removal of a prerequisite in physics. On the other hand, the second example illustrates an opposite trajectory: the introduction of a new multidisciplinary elective course on Quantum Computing, which initially lacked prerequisites but later integrated a prerequisite in Linear Algebra. We conduct a comparative analysis of student grades and course completion rates in both scenarios – with and without prerequisites – utilizing current assessment methods. Contrary to the prevailing assumptions, the presence or absence of prerequisites did not yield any discernible difference in student performance. These results cast doubt on the presumed indispensability of prerequisites in optimizing engineering education and challenge the conventional wisdom surrounding the layer-by-layer knowledge building approach.

12:10-12:35

74790 | *A Model for Student Nurses to Facilitate Holistic Caring Through the Development of Mindfulness*  
Lerato Matshaka, University of Johannesburg, South Africa

Holistic caring is needed for patients to be able to feel valued and appreciated. Caring for patients holistically will require student nurses to possess and display attributes of mindfulness. Student nurses therefore need to be supported and taught how to provide caring holistically to patients while being aware, being present and conscious in the caring moment. The purpose of this study was to develop and describe the model as a framework of reference to facilitate holistic caring through the development of mindfulness. A theory generative, phenomenological, exploratory, and contextual research design was followed. A diagrammatic structure was constructed after the concept analysis was conducted. The model consisted of three phases with an outcome and a relationship between the nurse educator and the student nurse. The model was evaluated and implemented by student nurses and the model provides a framework of reference to facilitate holistic caring through the development of mindfulness. This study adds a model of mindfulness and a lens of looking at mindfulness through an African Philosophy of Ubuntu to the body of Knowledge.

12:50-14:30 | Room 704

# Friday Onsite Presentation Session 3

## Curriculum Design & Development

### Session Chair: Lijueraj Cuadra

12:50-13:15

73945 | *Exploring the Direction of AI/Digital Convergence Education Teacher Training*

Suhong Park, Pusan National University, South Korea

Haeun Kim, Pusan National University, South Korea

AI-based education teachers want to make continuous improvement through the operation of training programs and performance checks in order to prepare an appropriate curriculum for learners. The teacher training curriculum to develop teachers' professionalism needs to be improved into a curriculum that analyzes social changes and the demands of the literacy education field and faithfully reflects them. Accordingly, in this study, a method of restructuring the teacher training curriculum, which is highly suitable for the field, was sought. Summarizing the above research results, the following conclusions can be drawn: First, the teacher training curriculum should be operated flexibly by considering the regional characteristics of training institutions. Education for teachers on AI and digital has characteristics of resources and participants in the metropolitan area and non-metropolitan areas, and in each region. As a result, there are gaps in the content and quality of educational programs and among the target audience by region. Therefore, it is necessary to provide flexibility by leaving room for elective subjects or adjusting the time in the curriculum organization, taking into account the target audience and literacy education environment by region. Second, continuity should be strengthened through linkage between teacher training and continuing education. In the case of teacher training, the concept of qualification training is actually strong as it is to complete the course to act as a literacy teacher with academic qualifications. In the case of continuing education, teachers who have obtained qualifications take part in actual education. Therefore, since teacher training to spread literacy.

13:15-13:40

73941 | *The Development of Assessment Process for Undergraduate Students' Learning Outcomes According to OBE Model*

Kesini Khemangkun, King Mongkut's University of Technology Thonburi, Thailand

Suchapa Netpradit, King Mongkut's University of Technology Thonburi, Thailand

The outcome-based education (OBE) focuses on an articulated idea of what skills and knowledge the students need to have after learning in course, especially used for occupation. The academic programs in university were designed and continuously improved for up to date according to the stakeholders' requirement before offering to students. Examination or post-test generally is a method for student assessment by evaluating abilities and achievements in every classroom to analyze the effective teaching. This case study showed the development process of learning outcomes assessment for 45 and 55 undergraduate students of 1st year and 2nd year by setting an activity as exhibition model for creative work called "Yearly Micro-Project" in the program of Packaging and Printing Technology, King Mongkut's University of Technology Thonburi, Thailand. For the 4-year curriculum, the year learning outcomes (YLO) of undergraduate students were set to assess KSA (Knowledge + Skills + Attitude) after the end of each academic year. The students gathered all knowledge to create works according to the problems specified by the instructors for presentation of their design and production process for printing and packaging materials. An assessment with Microsoft Forms of rating criteria (Rubric score) on 5-level was created for assessors who attend the exhibition activity could easily give the scores to each student. The advisors followed up on the progress of their work, collect assessment results and summarizing student learning outcomes. The satisfaction of students and teachers for this project were evaluated, indicating that this learning outcome assessment method was very appropriated.

13:40-14:05

75916 | *Improving the Global Presence of Undergraduate Programs Using Tracer Study*

Lijueraj Cuadra, Visayas State University, Philippines

Rachel Kim Aure, Visayas State University, Philippines

Catherine Arradaza, Visayas State University, Philippines

Charis Rivera, Visayas State University, Philippines

Angelica Barcos, Visayas State University, Philippines

Global competence is often, and rightly, labeled a "21st-century skill" needed for employment in today's global economy. To respond to this, Higher Education Institutions (HEIs) nationwide have been constantly assessing their academic programs. An approach to achieve this end is through a tracer study. The study aimed to develop a better understanding of the effects of the education system on employment by evaluating the graduates of one of the universities in the Philippines. A total of 2,429 graduates responded to this study. A quantitative research employing a structured survey questionnaire was utilized to gather data analyzed through frequencies and percentages. Results showed that most of the graduates were female, young, belonged to the working-age group, and were single. Furthermore, most graduates possessed critical thinking and communication, creativity, and career and learning self-reliance competencies, and were employed and occupying professional, technical, and supervisory positions, with an employability rate of 66.99%. Graduates believe that the core values and goals of the university were relevant to their respective job performance. However, the study found that universities need to revisit their existing curriculum to enhance graduates' employability, especially in the global arena.

14:05-14:30

75697 | *Leveraging an Artificial Intelligence Online Proctoring System to Monitor Online Examinations in Higher Education*

Sibongile Simelane-Mnisi, Tshwane University of Technology, South Africa

The purpose of the study was to investigate the effectiveness of an artificial intelligence online proctoring system to monitor online examinations and maintain academic integrity among academics and students in higher education. This study was motivated by the literature's concerns that academic integrity is still an ongoing problem in higher education. There are still a lot of security and usability issues with the proctoring tools that require further research. Furthermore, the opinions of academics and students on online assessment proctoring services were not being fully investigated. Due to these concerns and the changes brought about by COVID-19 pandemic, this is the body of knowledge to which this study intends to contribute and fill the gap. Participants in this study were 106 academics and 592 students from the University of Technology in South Africa. A mixed-methods study was carried out using both closed-ended and open-ended questionnaires. The frequency distribution in SPSS was used to analyse quantitative data. Thematic data analysis using Atlas.ti was used to analysed qualitative data. The results revealed that 80.1% of the students took the online examinations or tests on the learning management system using the proctoring tool. Some of the academics revealed that the proctoring tool was good; however, it did not stop students from cheating. The move toward authentic assessments in higher education should be made to encourage the development of 21st-century skills required by future graduates to thrive in the present, digitally driven economy.

14:45-16:00 | Room 704

# Friday Onsite Presentation Session 4

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Kgomotsego Brenda Samuel

14:45-15:10

71012 | *Debate: A Pedagogical Approach in Power Generation*

Herman Lagon, Iloilo State University of Fisheries Science and Technology, Philippines

This quasi-experimental research aimed to study the role of debate in the students' achievement in power generation. 120 students coming from two selected high schools were match-paired to comprise the traditional and the debate classes. Conducted in two separate institutions from November, 2022 to January, 2023, this mixed pretest-posttest method of research utilized the researcher-made Achievement Test in Power Generation Questionnaire. The inferential analysis is assumed at 0.05 level of significance. Observations, interviews, and FGDs were used for qualitative analysis. There were significant differences (1) between the pretest and the posttest scores in both the traditional group and debate group; (2) in the mean gain between the traditional and debate groups; and (3) in the posttest scores using the two strategies, when classified according to MFI. Students perceived debate as an effective, engaging, competitive, relevant, fun, and enlightening strategy in teaching power generation. They said that it likewise honed their science process, leadership, communication, social, argumentation, interpersonal, and research skills. With these, the researcher was able to formulate the 3H (Hook, Heart, Hutzpah) Theory which posits a three-pronged pedagogical approach in the formulation of an effective and efficient teaching strategy in physics.

15:10-15:35

75762 | *Towards the Pedagogical Success in Phenomenon – Based Learning: Preparation of the Teachers to Apply the PhenoBI*

Nijole Ciuciulkiene, Vytautas Magnus University, Lithuania

Ilona Tandzegolskiene-Bielaglove, Vytautas Magnus University, Lithuania

PhenoBI is generally characterized as an innovative teaching/learning method that is based on real-life scenarios, expressed as an integral contemporary problem or natural phenomenon, which serves as the starting point for learning. Students and teachers are stimulated to cross strict disciplinary boundaries in order to dive deeper into a topic, presenting and analyzing a problem. Such conditions provide a more versatile education: humanities, arts and STEM disciplines are developed simultaneously. The main aim of the research is to find out how Lithuanian teachers evaluate their experience of applying PhenoBI. What factors do they highlight that influence their success in PhenoBI scenarios? Data collection methods: quantitative survey (n=405). Data analysis methods: SPSS program. Thematically homogeneous statements of the questionnaire were reduced to scales. Cronbach-alpha values of the reliability coefficient of the created scales ranged from 0.72 to 0.91. The created scales are related to such theoretical concepts as the variety of applied learning methods, educators' attitudes towards the application of innovations (positive or critical), the educational institution's innovative culture or its deficit, students' abilities and determination to learn actively and consciously. The hypothesis raised in the quantitative study: "Phenomenon-based education can be successfully applied when teachers have knowledge and didactic experience in the field of innovative learning methods, the teachers demonstrate positive attitude towards the introduction of educational innovations" was confirmed, as a correlation was found between the positive attitude towards innovative methods and the application of new methods.

15:35-16:00

75732 | *Pedagogical Impediments Towards Promoting 21st Century Classrooms: Exploration of South African Science Curriculum Implementation in Five Secondary Schools*

Kgomotsego Brenda Samuel, North-West University, South Africa

Washington Takawira Dudu, North-West University, South Africa

This paper explores the pedagogical impediments encountered by South African Natural Sciences teachers when implementing curriculum (CAPS) for a 21st century classroom. This study was motivated by the uncertainties behind pedagogical practices relevant for promoting a 21st century classroom that persist. This paper focuses on the hindrances that hamper 21st century classroom practices with the aim of intervening. This study was guided by Vygotsky's (1978) socio-constructivist theory which upholds collective construction of quality knowledge. As such, a teacher professional development intervention (PDI) was run to create a platform for knowledge construction and sharing. Data were generated through lesson observations, artefacts and a semi-structured interview with 5 Natural Sciences teachers (n=5) of one district purposively selected. These sets of data were triangulated to trace the pedagogical impediments that exist. Data gathered through lesson observations and interviews were thematically analysed using open, axial and selective coding (Strauss & Corbin, 1990). Artefacts were analysed using content analysis. The results indicated that indeed teachers use their own discretions to implement curriculum, making them to learn as they teach, a 'design as you build' concept. The main finding revealed prevalence of different pedagogical practices when teaching Natural Sciences. This paper concludes that unless South African education system prioritise inculcating common 21st century pedagogical approaches for implementing CAPS, realising a goal of producing a 21st century learner as envisaged, may remain a dream deferred. This study recommends ongoing and progressive professional development workshops for immediate mitigation of pedagogical challenges as those observed from the five teachers.

09:00-10:40 | Room 705

# Friday Onsite Presentation Session 1

Education Policy, Leadership, Management & Administration

Session Chair: Dube Bekithemba

09:00-09:25

73926 | *Improvement of Data Management to Support Educational Quality Assurance of a Faculty in University Using Digital Platform of Microsoft Teams*

Jaranya Sangthong, King Mongkut's University of Technology Thonburi, Thailand  
Wisitsree Wiyaratn, King Mongkut's University of Technology Thonburi, Thailand  
Opas Vongwongrak, King Mongkut's University of Technology Thonburi, Thailand

The educational quality assurance (QA) is the management and operation of universities to continuously improve the quality of students and graduate students. The purpose of this study is to improve the data management process for QA of the Faculty of Industrial Education and Technology, King Mongkut's University of Technology Thonburi, Thailand by using the Microsoft Teams. The principle of SIPOC model had been applied for brainstorming and gap analysis, showing that the main problem was an inefficiency in data management including data collecting, organizing, and accessing. The conventional process of information preparation was performed by requesting cooperation from relevant parties which was complicated and delayed, causing lately report submission as requirement. The process for data management of QA was then improved by analysis of data source, type, sequence, period, and connection before redesign using the Microsoft Teams platform. The channel of data collection was communicated with involved administrators to understand and access easily. There was also notification system for staffs to store information at the appropriate time by setting in the google calendar. The results have been follow-up by evaluating the satisfaction of users to the improved system using online questionnaire with 5-scale, showing that the system was good with the mean score of 4.1. The results of this study could enhance the systematic management of data collection, quickly and easily to find the information, reducing the process of QA report preparation. In addition, this procedure could be a good guideline for other practices of the faculty.

09:25-09:50

73653 | *Development of Informative Reports for Analysis of Student Admission: Case Studies for the Faculty of Industrial Education and Technology, KMUTT*

Aileenda Sonprint, King Mongkut's University of Technology Thonburi, Thailand  
Wisitsree Wiyaratn, King Mongkut's University of Technology Thonburi, Thailand

Before Covid-19 crisis, the results of undergraduate admission were reported using paper-base with raw data. As a result, the administrators were unable to apply the unclear information for decision in a timely manner. This case study was performed by the academic affair of the Faculty of Industrial Education and Technology, King Mongkut's University of Technology Thonburi (KMUTT), Thailand. The undergraduate admission process was analyzed in group discussion according to the SIPOC model, found that administrators as suppliers wanted to get the dashboards of informative reports which must be accurate and up to date. The online informative reports were then developed using Looker Studio program to make the big data easier to determine for student admission management. The dashboards could display various information such as number of applicants in each academic year, round, academic programs, and category. The system could show grade point average and school of applicants, and which programs or categories were the most interested. There are usually 4 rounds of admission by Thai University Central Admission System (TCAS) for 8 undergraduate programs in an academic year with >10 categories, resulting in big data analysis. After applying the Looker Studio program to present the online informative reports for 5 academic years since 2019, the satisfaction of administrators and related staffs as the target group was evaluated using online questionnaire with 5-point Likert scale. The opinion of 22 respondents showed that they were strongly agree with the online informative reports which are very appropriate to understand and analyze.

09:50-10:15

73959 | *Development of Student Status Reports of a Faculty in University Using Interactive Microsoft Power BI for Effective Academic Administration*

Pattavee Kittaratip, King Mongkut's University of Technology Thonburi, Thailand  
Wisitsree Wiyaratn, King Mongkut's University of Technology Thonburi, Thailand

The student status report is generally designed for academic administration to get information to analyze the learning progress. For the case study at the Faculty of Industrial Education and Technology (FIET), King Mongkut's University of Technology Thonburi, there are 8 undergraduate programs, 7 master's programs, and 1 doctoral program. There are average number of 755 students per academic year for all undergraduate students, graduate students, and PhD students. The big data of FIET students could be retrieved from the Academic Information System (New ACIS) which shows the information of student admission, students' history, enrollment, request, study timetable, grades, etc. To support the student admission and academic administration, the data of student status was summarized to be an interactive report using Microsoft Power BI. The system has been continuously improvement from the academic year of 2012 to 2021. The online report included of 3 items: (i) current students registered in the system, (ii) graduated students, and (iii) students who dropped out. In addition, it also showed the grades before admission, current grades, category of application, education history, etc. This developed system could be conveniently reported via online to the administrators for planning and decision-making. The satisfaction of 10 users was evaluated with online questionnaire of 5-scale on 4 topics: ease of viewing, sufficient of data, benefits and outcomes, suitability of report, showing that the average score was >4. Moreover, there was suggestion to develop the system linkage between the faculty and programs to follow-up and analyze the progress of student learning.

10:15-10:40

74813 | *Teaching and Learning in Troubled Times: What Can Academia Offer in Conflict Ridden Universities*

Dube Bekithemba, University of the Free State, South Africa

In this presentation, I seek to interrogate best strategies for teaching and learning in higher education in troubled times. Various campuses have experienced continued academic disruptions, arson, and violence. In addition, there has been continued presence of SAPS and private securities to mitigate challenges of student protest. With this context, best strategies should be explored to mitigate the continued disruptions and in so doing, I tap into posthuman era thinking to locate best practices from the USA context in dealing with student protest. I argue that the setup of university activities in South Africa, funding models, presence of political parties on campus, disintegrated multi campus models, and skewed distribution of resources at local and national level leaves a lot of room for student to engage in disruptive protest. Thus, a reevaluation of academic program underpinned by academia theorization can address challenges to reinvent safe campuses that evoke quality education

10:55-12:35 | Room 705

# Friday Onsite Presentation Session 2

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Dennis Lee Jarvis Ybañez

10:55-11:20

75942 | *Nurturing Inquiring Mind Through the Quest of Augmented Reality: An Experiential Learning Approach*

Norphealey Eang, King Mongkut's Institute of Technology Ladkrabang, Thailand

Sirirat Petsangsri, King Mongkut's Institute of Technology Ladkrabang, Thailand

John Morris, King Mongkut's Institute of Technology Ladkrabang, Thailand

Nurturing students' inquiring minds is essential as it encourages curiosity and critical thinking, both of which are tools for independent learning and problem-solving. In this study, we examined the effects of AR-Quest activities integrating with the experiential learning approach on undergraduate students' inquiring minds. Thirty Thai undergraduate students participated in the study, which spanned a three-week period, where students were asked to do AR quests. The AR quests were designed to be inquiry-based, fostering students' discovery, collaboration, and reflection. The AR quests encompassed a confirmation quest, a discovery quest, and a collection quest. We used a 5-point Likert scale survey questionnaire to collect data on the students' curiosity, critical thinking skills, and willingness to explore new ideas. Descriptive statistics was employed to calculate mean scores and standard deviation. The findings revealed that the AR-Quest activities stimulated the students' curiosity, promoted their critical thinking, and enriched the learning experience. Additionally, the findings suggested that the experiential AR activities could foster an engaging learner-centred environment that encouraged exploration, questioning, and discovery. In this regard, the integration of experiential learning with AR technology facilitated a shift from a conventional classroom paradigm to a more dynamic, interactive learning regime, which consequently makes learning meaningful and nurtures students' inquiring minds. However, in future studies, researchers/educators are recommended to consider a controlled group comparison to provide a comparative baseline to measure the effectiveness of the experiential AR-Quest activities.

11:20-11:45

76143 | *The Influence of Parenting Patterns on the Level of Creativity of Preschool Children (4-5 Years)*

Dian Novita, Universitas Terbuka, Indonesia

Preschoolers are creative individuals, unfortunately many parents and teachers are less aware or less able to appreciate children's creativity. Education services to early childhood are a very influential basis for the development of children from childhood to adulthood. Based on the importance of parenting in increasing children's creativity, the problem is what kind of parenting style is effective in increasing children's creativity. This study aims to determine the influence of individual characteristics and family characteristics on creativity and parenting on the level of creativity of kindergarten children. This research method is a cross sectional study. Conducted at Ananda Kindergarten with a sample of 30 children. With primary and secondary data types. Data were obtained through observation, interviews and documentation studies. The result of the study explained that the sex and birth order of children did not correlate with the parenting style applied by parents at home. Family characteristics do not correlate with their parenting style to children, nor do children's characteristics to creativity. There is a significant relationship between father and mother education with children's creativity in dealing with boredom, in answering children's questions in play activities can increase creativity. There is a significant relationship between the parenting given by parents to the child's imagination ability, getting to know the surrounding environment, answering questions asked from children can increase children's ability to experiment, cause new stimulation of children in overcoming boredom.

11:45-12:10

73944 | *Exploring Student Narratives: Designing a Komiks for Probability Through Students' Subjective Visual Imageries*

Dennis Lee Jarvis Ybañez, University of the Philippines Open University, Philippines

Catherine Vistro-Yu, Ateneo de Manila University, Philippines

With the recent technological advancements and proliferation of digital experiences, data has become increasingly accessible and complex. The vast amount of data available to everyone demands acquisition of statistical and probabilistic literacy and fluency. This is essential in making informed and evidence-based decisions when faced with uncertainty. However, due to the highly abstract nature of these concepts, particularly probability, students have to solely rely on procedural approaches, making mathematical objects senseless entities. This results in students' inability to compare, categorize, visualize, and represent mathematical ideas (Davydov, 1990) which inhibits students' meaning-making processes. Rivera (2010) posited that meaning making is grounded on mental images or visual representations through shared practices of language and symbols. Hence, understanding the types of visual imageries formed by the students and how they use these imageries to give meaning to mathematical objects are important aspects to consider in designing learning materials. The participants of the study were 79 Grade 11 students enrolled in a public school in Metro Manila, Philippines. To capture the different aspects and richness of their experiences, phenomenography was used. Through the principles of design science, this study consisted of three phases: (1) presenting three different visualization objects to the students, two of which are conventional, and one is an alternative; (2) identifying students' visual imageries; and (3) designing a visual artifact based on the subjective visual imageries of the students. Results show that the designed visual artifact (komiks) allowed students to transform their subjective visual imageries into a more structured visual representation.

12:10-12:35

70477 | *The Impact of Reinventing Traditional Games in Educational Way in Developing the Reading Skills of Selected Public Kindergarten Pupils in Pasig (Philippines)*

Armie Joe Abe, University of the Philippines, Philippines

Jobelle Lacno, La Consolacion University, Philippines

One of the goals of every preschool teacher is to help their pupils learn how to read or at least make them ready. In our country, which is the Philippines, there were numbers of pupils who passed primary levels without knowing how to read. Thus, making them read at an early age is a big step to eliminate this problem. Making preschool pupils learn how to read is not an easy task. It should be fun and enjoyable. They have to make them see reading as an enjoyable thing to do and not something that they must do. And so the researchers make some traditional games educational. In a span of six months selected preschoolers underwent a program called ABAKALARO at Matuto (ABCs of Learning). This program is a series of educational games that will test and develop the reading skills of the participants. They re-invented some indigenous games in the Philippines (Palarong Pinoy) that have been part of the Filipino but due to the rise of technology, many children nowadays are not aware how to play them. The two main goals of the study were achieved. The participants of the study showed significant improvement in their reading skills and some of the traditional games were revitalized. This is both a qualitative and quantitative study. The reading skills of participants before and after the six-month program were recorded and analyzed. The result of the study showed an increase of reading progress among the 83 selected kindergarten pupils of Pinagbuhatan Elementary School.

12:50-14:30 | Room 705

# Friday Onsite Presentation Session 3

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Soliha Sanusi

12:50-13:15

73936 | *Education and e-Learning Activities During the COVID-19 Pandemic Through the Lens of Vietnamese Undergraduate Students*

Diep Nguyen Ngoc, Duy Tan University, Vietnam

Anh Doan Hai, Hanoi University of Science and Technology, Vietnam

This study aimed at exploring the barriers and facilitators facing undergraduate students at Vietnamese universities. There were 1,528 students participating in an online questionnaire, and a total of 1,467 valid replies (a response rate of 96%) were used for the analysis process. STATA software version 16 was used for data analysis. A regression with categorical variables was employed to determine the impact of variables on expected outputs. Students who did not have a comfortable home learning environment were more likely to have barriers; meanwhile, more time spent on learning was a protective factor against barriers to online learning. Besides, feelings of pressure, anxiety, and stress were risk factors for facilitators and increased barriers. Moreover, studying science, technology, and internet quality had a significant impact on facilitators. This study suggested that mental health promotion campaigns, financial supports, and facilitative policies need to be considered to improve facilitators and reduce barriers to online learning.

13:15-13:40

75950 | *Surveillance on College Students' Experiences During Online Modality: Towards an Independent Learning Approach*

Jennifer Tucpi, Lyceum of the Philippines University, Philippines

With the COVID-19 pandemic that resulted in lockdowns in the Philippines starting in March 2020, learning had to be immediately shifted to an online modality, a setup where students studied mostly on their own forcing them to become independent learners. Using descriptive phenomenology by Paul Colaizzi as a research design, the study investigated the lived experiences of college students under the online learning modality during the COVID-19 pandemic. Through in-depth interviews, data was gathered from 15 full-time third-year college students during the Second Semester of the Academic Year 2022-2023 at a Philippine higher education institution. Findings showed that participants mostly describe independent learning as "learning on your own" or "self-study". As a result of learning alone during the pandemic, they were able to develop independent learning skills and capabilities such as flexibility and adaptation, self-reflection and continuous improvement, openness to new perspectives, resourcefulness and self-reliance, and setting goals and measuring progress. Results further revealed that students became resilient; they were able to adapt to the new learning setup and found ways to learn on their own to survive or thrive in the new learning setup despite the difficulties during the COVID-19 pandemic. Recommendations included promoting independent learning through explicitly creating a policy and clearly incorporating it into the curriculum, pedagogy, assessment, and support service programs of the university, to fully realize the potential of students to become independent learners.

13:40-14:05

74994 | *Malaysia and China: A Comparative Study of Students' Satisfaction with Online Learning*

Soliha Binti Sanusi, Universiti Kebangsaan Malaysia, Malaysia

Nik Herda Nik Abdullah, Taylor's University, Malaysia

Zulaikha Amirah Johari, Universiti Kebangsaan Malaysia, Malaysia

Aziatul Waznah Ghazali, Universiti Kebangsaan Malaysia, Malaysia

As a result of the Covid-19 pandemic, which pressed many education institutions around the globe to suspend in-person interactions, the vast development of online education today has become even more significant. Since then, education providers have been compelled to integrate online learning as an alternative to the blackboard method of instruction. The role of online education has shifted from supplementary to the main mode of instruction and learning for education providers at all levels, including universities. Therefore, this study investigates the factors—including students' preparation, internet availability, technical assistance, and psychological support—contributing to their satisfaction with online learning among higher education students in Malaysia and China. Three hundred thirty-six (336) Malaysian responses and three hundred thirty-three (333) Chinese responses were collected via an online survey. Four hypotheses were examined using Smart PLS 4.0 for data analysis in the current study. Except for internet accessibility, the current study revealed that all factors have a significant relationship with student satisfaction in both countries. The findings enriched the literature review of instruction and learning that had a particular emphasis on online education. Accordingly, educational institutions should use these findings to create strategies as guidance for the online learning environment to achieve higher satisfaction among students.

14:05-14:30

73914 | *Factors Influencing University Students' Self-regulated Learning in a Massive Open Online Course Environment*

Yue Hu, Hangzhou Normal University, China

Mei-Yu Chen, Hangzhou Normal University, China

The significance of self-regulation in MOOCs has been well noted in research. MOOC learners need to manage their learning efficiently; however, researchers indicate that they do not adequately self-regulate their learning. Therefore, this study proposed a research model to investigate the factors influencing self-regulated learning in the MOOC environment based on the stimulus-organism-response (S-O-R) model, the self-determination theory, and the DeLone and McLean model of information systems success. In this research model, system quality, course design, and media-supported interaction are framed as environmental stimulus factors, whereas autonomy, competence, and relatedness can be framed as individuals' internal psychological factors. Data collected from 271 undergraduate students through questionnaire surveys were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The collected sample was statistically powerful enough to test the research model and exceeded the minimum required sample size of 146 participants, as determined by utilizing the G\*Power 3.1 tool. The results revealed that autonomy, competence, and relatedness all had a direct and significant positive impact on undergraduate students' online self-regulated learning, while system quality, course design, and media-supported interaction all had an indirect effect. Based on the findings, this study proposed strategies to improve undergraduate students' online self-regulated learning.

14:45-16:00 | Room 705

# Friday Onsite Presentation Session 4

## Learning Experiences

### Session Chair: Thoedsak Chomtohsuwan

14:45-15:10

73740 | *Learning of Successors in Long-Lived Family Firms: Knowledge Construction for Entrepreneurial Mindsets*

Koichi Chujo, Japan Advanced Institute of Science and Technology, Japan

Rihyei Kang, Hosei University, Japan

This study explores how successors in long-lived family firms learn entrepreneurial mindsets that orient the reconfiguration of unique resources of family firms. Learning to shape business values and beliefs is important for successors because values and beliefs are the firms' core related to organizational identity and culture. Entrepreneur mindsets are values and beliefs that pursue opportunities. Previous research indicated that successors do not only acquire knowledge from their predecessors but also learn from external education, internal and external work experience, and stakeholders. Our previous research about long-lived family firms showed that entrepreneurial mindsets are one of the elements learned from transgenerational family knowledge and that successors have complex learning of explicit and tacit knowledge. This research to deepen entrepreneurial mindsets is a case study of semi-structured interviews with family managers of 15 family firms over 100 years since their establishment in Japan. The findings show three types of learning for entrepreneurial mindsets. 1. Learning entrepreneurial mindsets from transgenerational family knowledge. 2. Recognizing the constrictive resources of the family business and forming entrepreneurial mindsets from self-learning or external experience forward retrieve of the family business. 3. Recognizing VRIN (Valuable, Rare, In-imitable, and Non-substitutable) resources of the family business and forming conservative entrepreneurial mindsets to maintain current resources. Successors of long-lived family firms understand the history and current situation of the family business and form their values and beliefs through comprehensive learning. Their values and beliefs lead to optimizing actions for the persistence of the family business.

15:10-15:35

73957 | *Strengthening Characteristics of Outstanding Community Business in Sakon Nakhon Province, Northeastern Thailand*

Sukontip Vianmana, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus (KUCSC), Thailand

Patcha Sattaka, Kasetsart University Chalermphrakiat Sakon Nakhon Province Campus (KUCSC), Thailand

Over decades, Thai government has been supporting and empowering people in local areas to organize community business groups and creating unique local-based products. However, many groups have been still unsuccessful. To encourage those unsuccessful business groups to become more strength, study on operations of successful business groups is vital. An indigo dyed fabric is a traditional wisdom passed on from ancestors and spread widely especially in Northeastern part of Thailand. Therefore, this study aims to indicate strengthening characteristics of outstanding community business. This study employed both quantitative and qualitative research techniques to collect the data on Don Koi indigo dyed fabric group. The group leader was purposively interviewed as recommended by the community development officer as an excellent community business group in Sakon Nakhon Province which was Don Koi indigo dyed fabric group. Descriptive statistics was used to explain general information and strengthening characteristics of the group. The results displayed that the indigo dyed fabric group had established since 2003. There were 63 members in the group. There were totally 7 types of group products. The group earned 5 stars of OTOP award. The strengthening characteristics of the group in terms of producing, marketing, administrating, and financing were clear clarified. The government had been supporting the group some budgets, materials and knowledge since establishment. The results indicated that well planning process before producing, marketing, administrating, and financing activities were crucial and the group personnel working with systematic tasks and their discipline continuously were clearly strengthening characteristics of the group.

15:35-16:00

74131 | *Investment in Social Science Education and Its Worthwhile Wage*

Thoedsak Chomtohsuwan, Rangsit University, Thailand

Narissara Charoenphandhu, Rangsit University, Thailand

Kitsana Lerdkasetwittaya, Rangsit University, Thailand

Investing in education is a type of capital accumulation in humans. The value of money spent or accumulated in humans from birth to graduation is called human capital. Therefore, being a company employee is like investing in capital equal to the amount of human capital accumulated in that company. Wage or salary earned by a company is also like a return on investment. This research aims to find out what wages we earn each month after graduation and whether it is worth the human capital in us or not. What should be the wage rate worth investing in? This research uses primary data from questionnaire survey and secondary data from the National Statistical Office of Thailand. This research focuses on the study of social sciences in five bachelor degrees including human resources, economics, accounting, law, and public relations. The findings showed that, in 2022, the initial wage rate of new graduates in the five fields of social sciences in Thailand are not worth for their human capital invested from birth to graduation. Preliminary suggestions from this research are as follows: The government should implement a policy to improve the quality of education to increase graduate productivity. The higher graduate competencies and skills will result in employers willing to pay wages at a higher rate. The government should implement a policy to encourage new graduates to conduct their own business to raise their income higher than being an employee.

09:00-10:40 | Room 708

# Friday Onsite Presentation Session 1

Primary & Secondary Education

Session Chair: Jaysveree Louw

09:00-09:25

69893 | *Chalk Talks! Using the Making Thinking Visible Routine-Chalk Talk to Analyse and Deepen Students' Understanding of Sources for History*

Chin Pang Joseph Tham, Academy of Singapore Teachers, Singapore

Rabiatul Binhan, Yusof Ishak Secondary School, Singapore

Wei Yang Kang, Yusof Ishak Secondary School, Singapore

When our teachers are teaching History in our secondary classes, one observation about our secondary 3 students' responses was that students were not able to effectively analyse the sources and they tend to focus on the first thing that they saw. Through examining the annotations on their source, we also realized that the students tend to analyse the sources hastily without taking into consideration the historical context and tapping into their prior knowledge. Students were also not able to make the judgement on whether their source analysis was accurate. As such, our team identified the Making Thinking Visible routine- Chalk Talk as a suitable thinking routine to help students deepen their understanding and improve their source analysis skills. Through Chalk Talk, students will be able to analyse on their own the given sources and subsequently leverage on the other students' comments and perspectives to guide them in making an accurate analysis of the source they have been allocated to. This also enables them to draw upon their historical knowledge and prior knowledge when analysing a historical source in order for them to agree, disagree or question their peer's perspective or source analysis before consolidating and deciding on the message of the source. Technology was also used to enhance the learning experiences of the students.

09:25-09:50

71991 | *Career Preferences as Determinants of Digital Technology Interaction and Importance Among Junior High School Students*

Maria Kristina Santos Alfonso, Ateneo de Manila University, Philippines

Marites R. Veloso, Ateneo de Manila University Junior High School, Philippines

Claire G. Castro, Ateneo de Manila University Junior High School, Philippines

Digital technology has become integral to adolescents. Studies explored different impacts that immersion in it has on various aspects of an adolescent. Positive and negative outcomes have been discovered. Personality as a relevant factor also showed promise in understanding what makes digital technology use significant or not when adolescents are interacting with it. However, digital technology and its relationship with career interests have yet to be investigated. Career interest is one component that schools focus on to help students in making wise career choices. Researchers often delve into career choices and their relation to knowledge and skills with digital technology. There is sparse literature that considers students becoming engaged in digital technology because of their career preferences. For this study, career preferences as measured by the Adolescent Personality Questionnaire (APQ) were examined to see how they relate to digital interaction and its importance among junior high students. Along with the Adolescent Digital Interaction and Importance (ADTI) Scale, these tools were administered to 1,320 junior high school students from an exclusive boys' school. Data were computed and analyzed using correlation and regression. Results indicated that out of the six (6) career preferences, three (3) were significantly associated with overall ADTI and five (5) with its subscales. Two (2) career preferences were also shown to be significant predictors of ADTI and its subscales. Findings can be essential when aiding students in their career planning process and guiding them to understand the utility of digital technology in the careers they are aiming for.

09:50-10:15

75827 | *An Investigation of Strategies Adopted to Prevent Violence in Schools in Saudi Arabia*

Saad Alshehri, University of Jeddah, Saudi Arabia

School violence is a pressing societal issue. Amidst growing concerns about school safety and intense public pressure, school administrators are taking action and implementing strategies designed to curb school violence. However, these strategies work best when schools, parents and the society are involved. Surveys were administered to parents and teachers to gather their perceptions of these strategies. Results were viewed through the lens of Bronfenbrenner's ecological. The findings indicate that the strategies used by the schools included dealing with disruptive behaviours early, monitoring students outside classrooms, organizing crisis response teams, and encouraging parental involvement. The study concludes that school violence should be addressed by society as a whole. The empirical contribution of this paper is founded on the fact that this study is conducted in the context of school violence and safety in Saudi schools where there is limited empirical evidence.

10:15-10:40

75913 | *Code-Switching in Mathematics Teaching in Early Childhood Education: Switching From English to the Second Language*

Jaysveree Louw, Central University of Technology, South Africa

In communication, code-switching refers to the process of using two or more languages in speech. South Africa is a multi-lingual and multi-racial society. Schools form part of societies, therefore it is to be expected that this 'multi-ness' will also be evident in schools. In many South African schools children are taught two languages namely their Home Language and a Second Language. Education policy proposes that subjects in primary schools be taught in the school's Language of Learning and Teaching. However, teachers often code-switch between the Language of Learning and Teaching and the Second Language. This article examines the disadvantages and benefits of code-switching in the teaching of mathematics in South African primary schools. Interviews were conducted with 35 teachers and 78 learners in primary schools that have English as a Language of Learning and Teaching and Sesotho as a Second Language. The findings revealed that teachers generally code-switch because they express themselves better in Sesotho. The majority of the learners reported that they appreciate it when the teachers explain mathematics in English and Sesotho. However, learners who do not speak Sesotho claimed that they feel lost when teachers 'teach' mathematics in Sesotho. The study concluded that code-switching can be employed in the teaching of mathematics, but teachers need to be cognizant of the fact that there are learners in their classes who do not speak Sesotho.

10:55-12:35 | Room 708

# Friday Onsite Presentation Session 2

Primary & Secondary Education

Session Chair: Ma. Venus Lacno

10:55-11:20

74493 | *Pro-poor or Anti-poor: Household Income and Public Preschool Attendance in China*  
Yang Tian, Nanjing Normal University, China

The difficulty of attending public kindergartens in China is a prominent reflection of the contradiction in the supply of preschool resources. This study uses the China Family Panel Survey data, based on the social opportunity function, constructs the opportunity index (OI) and the Pro-poor index of opportunity (POI) to measure changes of educational opportunities in public kindergartens in China. The results found that (1) From 2012 to 2018, the allocation efficiency of public kindergartens in China was not high, the average of educational opportunities in public kindergartens increased by 4.49%, and POI rose from 1.0001 to 1.126. The overall distribution of educational opportunities is pro-poor. (2) From the perspective of urban and rural distribution, from 2012 to 2018, the educational opportunities of rural public kindergartens grew the fastest, and the opportunity distribution was the most pro-poor, while the educational opportunities of urban public kindergartens decreased slightly, and the opportunity distribution was not pro-poor. (3) From the perspective of regional distribution, in the central and western regions, education opportunities in public kindergartens have increased to a certain extent, but are also highly pro-poor. Although educational opportunities in public kindergartens in the eastern region have expanded, they are not pro-poor. Suggestions to increase the output-to-investment ratio of educational resources in public kindergartens; optimize the supply of preschool education resources in the region to achieve "inclusive growth" of educational opportunities; pay more attention to public kindergartens attendances of "relatively poor" families in urban regions in China.

11:20-11:45

73769 | *Teacher's Perception of Independent Learning Curriculum in Pancasila Education Learning in Grades I and IV Bandung City Public Elementary School*  
Faisal Alam, Universitas Pendidikan Indonesia, Indonesia  
Sapriya Sapriya, Universitas Pendidikan Indonesia, Indonesia  
Agus Muharam, Universitas Pendidikan Indonesia, Indonesia

This study aimed to describe teachers' perceptions of the independent learning curriculum policy in grades I and IV at public elementary schools in Bandung. This study uses qualitative research, and this research uses a phenomenological research design. The phenomenological analysis examined elementary school teachers' opinions on the independent learning curriculum policy in Pancasila education learning. Respondents in this study were elementary school teachers. In this study, the data collection used was interviewed. All interview data were collected so that they could be studied descriptively to obtain reliable and reliable findings. The results of the study are as follows: (1) The teacher appreciates the independent learning curriculum policy implemented in elementary schools, (2) the important role of the teacher in implementing the independent learning curriculum learning in Pancasila education learning, depends on each teacher, (3) The teacher has the opportunity to develop and implementing curricula and planning lessons to improve the quality of the teaching and learning process, (4) there have been many platforms discussing the independent learning curriculum enabling teachers to learn independently to develop their skills, (5) but not all teachers have implemented the independent learning curriculum in their classes. (6) for aged teachers who have limited information and technology skills, (7) obstacles in implementing the independent learning curriculum, especially in learning Pancasila education, also depend on the stability of internet conditions, especially for those who teach in remote schools, this is the main obstacle.

11:45-12:10

76713 | *Development "Tangram Sultan" as Medium for Presenting Angle and Side of a Two-Dimensional Figure in Elementary School*  
Yenita Roza, Universitas Riau, Indonesia  
Arisman Adnan, Universitas Riau, Indonesia

Children naturally learn through play, which has been shown to be age-appropriate and a useful learning strategy. The goal of this research is to create media that will help elementary school pupils understand geometry through games. Tangram Sultan is the name of the produced medium that blend folkstory and mathematics games. The Tangram Sultan is a geometry game that incorporates Siak Sultane Riau folklore to provide a unique experience. The ADDIE development model was used to present the Tangram Sultan's development in this research. Two Elementary Schools at Riau have tested the Tangram Sultan game. The following activity levels are used with the Tangram Sultan Games to develop students' awareness of the angles and sides of various shapes of two-dimensional figures: (1) An introduction to Tangram Sultan Media, (2) Using media to further learning objectives, and (3) assessing the learning process. Students were able to recognize angles and sides as well as count the number of sides and angles present in a variety of unique Two-dimensional figures with the assistance of this media. Additionally, the classroom is transformed into a joyful learning environment via the media.

12:10-12:35

70482 | *Combating the Double Burden Malnutrition of Pinagbuhatan Elementary Pupils through Improved Feeding System*  
Ma. Venus Lacno, La Consolacion University, Philippines

Combating the double burden of malnutrition is a yearly challenge of every feeding program in elementary school. Studies have shown that proper nutrition has a direct effect on student performance in school. Thus, the feeding center of Pinagbuhatan Elementary School took step to ensure that pupils still get proper nutrition and engage in healthy lifestyle amidst pandemics. This qualitative study showed that by upgrading the existed feeding program, malnourished pupils, both underweight at overweight/obese, improved their weight and BMI. The improved system includes different activities like using index card during distribution, feeding ID, acknowledgement receipts, Zumba, webinar with lifestyle coach etc. that may seem simple yet had a significant effect in terms of having normal weights of malnourished pupils. Finally, by continuing the program in at least three years, there will be a significant improvement in nutritional status and hopefully eradicate the double burden malnutrition.

12:50-14:05 | Room 708

# Friday Onsite Presentation Session 3

Teaching Experiences, Pedagogy, Practice & Praxis

**Session Chair: Khajornsak Buaraphan**

**12:50-13:15**

75485 | *Developing Global Skills Through Teaching Methods and Strategies: Primary School Teachers Preparedness and Practice in Kazakhstan*

Anara Urkunova, Zhubanov University, Kazakhstan

Dana Ryspayeva, Zhubanov University, Kazakhstan

Laura Karabassova, Zhubanov University, Kazakhstan

As stated in international studies, Kazakhstani teachers need to enhance their skills as a component of their professional development, even though the majority of teachers undergo professional training at advanced centers within Kazakhstan. The successful education of qualified teachers in teaching methods and strategies (both during pre- and in-service) influences the development of students' global skills. Global skills are necessary for a successful career and life in a rapidly changing world. Thus, it is essential that teachers are well-prepared to transfer and instill these skills in students. The central question that guided this research was to identify the preparedness and confidence of pre-service and in-service teachers in teaching methods and strategies for cultivating students' global skills. The sampling frame was based on the PISA 2018 results in Kazakhstan, which indicated that the western region was an outlier among other regions. This allowed us to select research participants. The online survey involved prospective primary school teachers (N=338) of pedagogical universities and in-service teachers (N=1217) from the western region. The research results showed that, in general, prospective and in-service teachers assess their preparedness and practical skills in teaching methods and strategies for students' global skill development positively, although students from the western region showed a low level according to the PISA 2018 results. Further analysis of classroom observations is necessary, as it will allow researchers to obtain more reliable data. These findings will contribute to the Ministry of Education of Kazakhstan in developing methodological guidelines to improve teaching practices.

**13:15-13:40**

74355 | *Integration of STEAM with Local Context for Enhancing Early Childhood Students' Creativity*

Jirutthitikan Pimvichai, Mahidol University, Thailand

Sri Insura, Anubanphusing School, Thailand

This article aims to: a) review, analyze and synthesize the literature related to Science, Technology, Engineering, Art and Mathematics (STEAM) education and Context-based Learning (CBL); and b) developing the Context-based STEAM instructional model for enhancing creative skills in early childhood. The authors analyzed the STEAM instruction from the national and international contexts by using content analysis. Then, the researchers synthesized the teaching steps of STEAM Integrated with Local Context (L-STEAM) for enhancing early childhood students' creative thinking. The teaching steps from these literatures were analyzed. From the analysis, the authors synthesized the L-STEAM teaching model consisted of six teaching steps: a) Introduce STEAM problem, b) Investigate, c) Act, d) Share, e) Apply and Extend and f) Self-assessment. At final, the authors raised one example of L-STEAM lesson plan for teaching the Toys and Accessories topic for early childhood students. This example may guide other early childhood teachers in applying local context in teaching with STEAM in any subject they assigned to teach.

**13:40-14:05**

74323 | *Development of TPCK Creativity-Based Learning Model for Improving Grade 7 Students' Academic Achievement and Creative Thinking*

Khajornsak Buaraphan, Mahidol University, Thailand

Sawitree Inprom, Thungsong School, Thailand

Creativity-based Learning (CBL) is useful in developing several important skills for mathematics students. This research aimed to: a) develop the CBL integrated with Technological Pedagogical Content Knowledge (TPCK) or TPCK-CBL Model to teach mathematics for Grade 7 students; and 2) examine students' development of academic achievement and creative thinking in the Ordered Pairs topic after learning with the TPCK-CBL Model. The mixed-methods research design was employed in this study. The researchers collected both quantitative and qualitative data from 70 Grade 7 students, who enrolled in the first semester of the 2022 academic year at Thungsong School, Nakhonsithammarat province, Thailand. The TPCK-CBL Model and its associated lesson plans, the Learning Achievement Test and the Creative Thinking Test was validated by five experts. The results yielded that the TPCK-CBL Model could foster Grade 7 students' academic achievement and creative thinking. Through the engagement in open-ended tasks, students were encouraged to think critically, generate innovative solutions for mathematical problems from multiple perspectives. The use of technology in TPCK further supported the development of students' digital literacy and enabled them to utilize digital tools and software to further explore mathematical conceptions in fruitful ways. This study highlighted the significance in incorporating TPCK with CBL for teaching mathematics for Grade 7 students in Thailand. Through TPCK-CBL Model, mathematics educators can create learning environment that truly nurtures students' academic achievement and creative thinking. Implementing TPCK-CBL not only enhances students' mathematical knowledge but also equips them with the essential skills needed for the current digital age.

14:45-16:00 | Room 708

# Friday Onsite Presentation Session 4

Interdisciplinary, Multidisciplinary & Transdisciplinary Education

Session Chair: Jack Tsao

14:45-15:10

74811 | *The Influence of Smartphone Voice Assistants Usage on University Students' Strategic Thinking and Decision-Making Skills in Learning*

Hafizah Omar Zaki, National University of Malaysia, Malaysia

Norasiah Omar, National University of Malaysia, Malaysia

Yusniza Kamarulzaman, University of Malaya, Malaysia

Suddin Lada, Universiti Malaysia Sabah, Malaysia

This study looks at how smartphone voice assistants affect the strategic thinking and decision-making skills of Malaysian university students. It investigates how voice assistants affect cognitive development such as problem solving and critical thinking, and on behavioural aspects such as decision-making skills. A cross-sectional survey of 500 university students with experience using voice assistants for education was conducted using Social Cognitive Theory and the Technology Acceptance Model (TAM). Structural Equation Modelling from AMOS were used to analyse the data, and confirmatory factor analysis was used to assess the measurement model's validity and reliability. According to the findings, voice assistants improve students' strategic thinking and decision-making skills. The findings highlight how voice technology in education promotes cognitive growth and self-directed learning. In addition, the study emphasises the significance of perceived usefulness and usability in student's technology adoption. The study makes an important contribution to education by implying that voice assistants can innovate teaching and learning methods. It provides educators and policymakers with practical advice on how to use voice technology to increase student engagement, critical thinking, and decision-making. Furthermore, the study opens new avenues for future research on integrating emerging technologies into education, contributing to the larger conversation about technology-enhanced learning.

15:10-15:35

75105 | *Cultivating a Design Thinking Mindset: The Impact of Design-Led Integrative Project-Based Modules on Students in the Creative Disciplines*

Clarice Sim, Singapore Polytechnic, Singapore

Li Min Chong, Singapore Polytechnic, Singapore

Mark Lu, Singapore Polytechnic, Singapore

This paper documents the impact of integrative project-based modules on creative students' mindsets. In 2020, Singapore Polytechnic was the first Institute of Higher Learning (IHL) in Singapore to merge eight different creative disciplines (e.g., animation, games, music, design) into one new common diploma. One of the main reasons was to address the increasing importance of hybrid skillsets in a complex world (SkillsFuture Singapore, 2020). A key feature of the diploma is project-based modules where students from different creative disciplines come together in mixed groups to work on real-world client projects, to cross-learn, deepen and integrate their skills. A design-led framework (Investigate, Imagine, Implement) is used to support learning across disciplines. The project-based modules were designed to cultivate a design thinking mindset in students. 13 dimensions of the design thinking mindset (Dosi et. al, 2018) were identified to be especially important for creative students (Design Education Advisory Committee, 2023). Surveys were conducted with year 1 and year 2 students (n = 278; n = 246) before and after the modules. We found that students grew in their design thinking mindset in both modules, especially in the dimensions of being comfortable with ambiguity, embracing risk, and mindfulness of the process, which are integral when tackling real-world challenges. Students' qualitative feedback further highlighted how beneficial it was to learn from and work with students from different disciplines. Our experience with integrating project-based modules in a common creative diploma would be useful to other IHLs and educators interested in design thinking or transdisciplinary mindsets.

15:35-16:00

75901 | *Design Thinking and Improvisation in the Professional Development of Interdisciplinary Teacher*

Jack Tsao, The University of Hong Kong, Hong Kong

Tanya Kempston, University of Hong Kong, Hong Kong

Our paper details an innovative professional development pilot for small classroom teachers at the University of Hong Kong to enhance the teaching of undergraduate interdisciplinary courses. The programme was delivered in 2021 - 2022 and encapsulated short modules with experiential and reflective exercises that drew on design thinking principles and improvisational theatre. Our data comprised workshop feedback, reflections, ethnographic observations of the participating teachers, qualitative survey responses from 56 interdisciplinary course tutors, and a follow-up interview with ten teachers. Through the theoretical lens of Deleuze and Guattari's concept of the nomadology and nomadic pedagogies, we elucidate how training underscored by design thinking and improvisational skills augments the adaptive capacities of teachers that bolster critical thinking and imaginative muscle of students. We specifically discuss how these exercises encapsulate and evolve around movements between striated and smooth spaces, repetitive synthesis, and rhizomatic thinking. The paper contributes to developing responsive and imaginative professional development programmes and teaching methodologies for contemporary higher education's uncertain, complex and ambiguous contexts.





# Saturday, November 25

## Online Parallel Sessions

All times are in Japan Standard Time (UTC+9)

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

# Featured Panel Presentation: Susie Kung, Mary Moeke, Yvonne Ulalesi No One Left Behind: Advocating for Equitable Opportunities for Success in Tertiary Education

Saturday, November 25, 2023 | 09:05-09:50 | Online via Zoom

There is much literature on the global expansion of tertiary education and the exponential growth of online teaching platforms. This move has been expediated by the COVID-19 pandemic. This relentless rise in the use of Education Online Technologies (EOT) has necessitated a closer examination of how various equity groups have fared in this time of rapid change in education. It is proposed that all these changes in education do not necessarily bring about equal access, participation, and opportunity for success. Several issues have been noted when exploring the relationship between tertiary education and equity. However, less research is available on the relationship between culturally responsive, sustaining, and safe online teaching-learning spaces and equitable opportunities for success in learning. This panel argues that the heart of teaching and learning is in relational connectedness and the rapid reliance on Education Online Technologies (EOT) has led to the marginalisation of some social groups. The literature on equity of access, participation and success is mostly oriented towards some clearly defined social groups that were, or still are considered as being discriminated against. The primary objective of this panel presentation is to propose that focusing on access and opportunity in education will open the door to a discussion on issues of moral equality and the belief that human beings should be given equal access to life chances. This will ignite a different perception of 'equity' and how it is lived and practised in tertiary classrooms. It is envisioned that this will, in turn, move our professional dialogue into issues of moral equality and the fundamental right of human beings to equal access to life chances. This panel seeks to address some questions on social groups that favour relational pedagogy and face-to-face teaching-learning environments. How might this rapid global march towards online learning and the pervasive rise in technologically enhanced teaching-learning environments, disadvantage such groups? Will power imbalances contribute to one form of delivery subjugating the other; one way of knowing and doing enslaving the other? Will this then lead to unequal opportunities for participation and success for some social groups in tertiary education?

## Susie Kung



Susie Kung has been in education since 1980 and in teacher education for over 26 years. She has been teaching in the Bachelor of Education programme at Manukau Institute of Technology (MIT) since 2006. She is a Senior Lecturer attached to the School of Education and is also the Academic Lead overseeing the provision of pastoral care and also the retention and success of four programmes in the School of Education. She has substantial experience in the field both in Malaysia and New Zealand.

Susie's passion for teacher education includes her research on effective tertiary teaching-learning spaces and, more recently, blended teaching-learning environments through COVID-19 times, teacher identity and teacher motivation, preparing student teachers for a fast-changing, diverse world and a reconsideration of teacher education as a holistic endeavour. Case study and narrative approaches to research are her methodologies of choice, but she has a special interest in the Appreciative Inquiry approach to research and has used this methodology for a number of her research projects. She is currently investigating the role of teacher identity, teacher motivation, and the teacher's perception of advocacy in the teaching role.



## Mary Moeke

Mary Moeke is of Te Arawa and Ngāti Awa Māori descent and currently works in Te Kura Mātauranga (School of Education) at Te Pūkenga - Te Whare Takiura o Manukau, Auckland, New Zealand. Mary has been teaching for over 30 years, across all areas of the education sector. Her research portfolio shows a strong commitment to uphold Mātauranga Māori (knowledge and understanding that are Māori) in pursuit of mokopuna Māori (children who identify as Māori) having the best start to life and positive childhood experiences. As a result, her research interest has become more focused over time on reducing and eliminating child poverty by improving the

professionalism and culturally responsive teaching practices within the early childhood sector that shift the social norms, challenge colonial practices, and encourage wealth creation growth and capability so that no one is left behind. Mary is currently working on a framework for positive change that operates as a Māori/Crown partnership and is supported by the Ministry of Social Development, New Zealand.



## Yvonne Ualesi

Dr Yvonne Ualesi hails from the villages of Samoa (Mulivai Safata, Pu'apu'a, Saipipi, Savalalo, Lotopa), Tokelau (Fakaofu), and Fiji (Ovalau). She is a lecturer at Te Wānanga Aronui o Tāmaki Makau Rau (Auckland University of Technology) in Te Kura Mātauranga (School of Education) and lectures across the BEd Primary, BEd Early Child Education, and BA in Education degree programmes. A doctoral scholar, she completed her PhD at the University of Auckland, New Zealand. Yvonne's PhD research was titled *Culturally Responsive, Sustaining and Safe Youth Mentoring Practice in Aotearoa New Zealand – A Va Relational Approach*.

She developed a novel multimethod approach underpinned by indigenous knowledge systems to explore key ingredients in youth mentoring as a strategy of adolescent development. Her research interests include Pacific/Pasifika research methodologies and indigenous social psychology in education.

Her most recent scholarship as a co-editor of a special edition for the *Ethnographic Edge Journal* focussed on amplifying the voices of Pacific/Pasifika, indigenous principals, and school leadership, specifically on how they are shifting the system in education from an indigenous lens. Dr Ualesi is an early career researcher (ECR) forum committee member of the Royal Society of New Zealand as part of the national voice of New Zealand's ECR community.

10:00-11:15 | Room A

# Saturday Online Presentation Session 1

Teaching Experiences, Pedagogy, Practice & Praxis

**Session Chair: Chengeto Chaderopa**

**10:00-10:25**

70234 | *Practice of Knowledge Presentation in Tunnel Engineering Teaching*

Jianqin Ma, Chang'an University, China

High education situation is increasingly challengeable. The courses in traditional fields would suffer more squeeze from the changing environment. The teaching style should accordingly be robust and more favorable to student knowledge acquisition. Here is the practice of knowledge presentation in Tunnel Engineering teaching at Chang'an University in China. The presentation style is part of the course design, with the considerations of the features of the course content and experiences. The contents consist of the knowledge sections related to both the foundations to Tunnel Engineering and major professional knowledge, including the planning, design, construction, operation and management of tunnels and underground structures, respectively. To be favorable to the student-centered procedure, the course presentation is systematically designed in terms of specified knowledge points, such as, concept, information or facts, experiences, theory and principle. Each of the knowledge points is presented in a progressive and flexible mode in terms of learning content and complexity. The efficiency and robust of the knowledge presentation are checked by student learning result evaluation, with the indexes of the student's knowledge learning levels. The practice results indicate that: (1) students are skillful to obtain course information, but most of them are frequently confused in information sampling, concept and knowledge system developments; (2) course instructors should focus on the presentation of key concepts, the connections of the knowledge points, student's learning skill and capacity development; (3) adequate evaluation and active motivation are necessary and favorable to student self-enhancement and knowledge building metacognitively.

**10:25-10:50**

76052 | *Enhancing Engineering Education Quality Through Practical Hands-On Experiments and Authentic Assessment*

Khuong Nguyen-Vinh, RMIT University, Vietnam

This paper presents an innovative approach to enhance engineering education quality by seamlessly integrating practical hands-on experiments with authentic assessment techniques. The challenge of bridging theoretical knowledge with real-world application is addressed within engineering pedagogy. The cognitive benefits of experiential learning are explored, emphasizing its capacity to nurture comprehension, retention, and critical thinking skills in students. The significance of authentic assessment methods is underscored in evaluating practical skills and problem-solving abilities. By emulating authentic real-world engineering challenges, educators can accurately assess students' preparedness for professional tasks. Drawing upon a range of case studies, the practical implementation of this approach is demonstrated across diverse engineering disciplines. These instances highlight the positive influence of practical learning on student engagement, enthusiasm, and skill acquisition. In conclusion, this paper asserts that the integration of practical hands-on experiments with authentic assessment techniques reshapes engineering education, fostering adaptive problem solvers, effective communicators, and proficient collaborators. This equips graduates to navigate the dynamic requirements of the industry effectively. Embracing such innovative pedagogical strategies emerges as pivotal in cultivating a new generation of engineers with both academic proficiency and industry relevance.

**10:50-11:15**

74144 | *Stemming the High Tide of Academic Integrity Breaches in Educational Settings: Authentic Teaching, Not Just Authentic Assessment*

Chengeto Chaderopa, International College of Management-Sydney, Australia

Nyemudzai Esther Ngocha-Chaderopa, International College of Management-Sydney, Australia

Technological advances such as Artificial Intelligence (AI) present an existential challenge to the whole concept of academic integrity in educational settings as well as the integrity and value of the qualifications being offered to graduates. In response to academic integrity breaches, educational settings have implemented several strategies. Out of these several responses, the most widely adopted in diverse educational settings is authentic assessment design. This is understandable because, assessment design is primarily emphasized in addressing academic integrity breaches because such breaches commonly occur in assessments. Moreover, the traditional evidence of educational attainment is typically a paper certificate obtained through the submission of tangible representations of learning, often in written form. This assessment design strategy of promoting academic integrity has become even more pronounced with the advent of powerful AI systems that possess the capability to generate assessments that often surpass the quality of what some teachers and students produce. Although educators are aware of the various strategies that can be used to combat academic integrity breaches, in reality they tend to overly focus on the assessment design strategy at the expense of real learning, as evidenced by the widespread use of plagiarism detection tools such as Turnitin, GPT-2 Output detector, and GPT-zero, as well as resorting to in-class examinations. This conceptual study explores the pedagogical potential of authentic learning strategies to promote academic integrity, drawing on experiential theories of learning. Authentic learning and authentic assessment are closely related but distinct concepts.

11:55-13:10 | Room A

# Saturday Online Presentation Session 2

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Yu Chun Liu

11:55-12:20

76018 | *Teaching Design in the Wake of Artificial Intelligence*

David Campos-Delgado, Universidad Autónoma de San Luis Potosí, Mexico

Ricardo Alonso-Rivera, Universidad Autónoma de San Luis Potosí, Mexico

In order to maintain its relevance and pertinence throughout history, Design Teaching has been pushed to regularly evaluate its adequacy in the face of cutting-edge technologies and constantly renewed tools. In that respect, the new paradigm of Generative Artificial Intelligence pushes once more the territorial limits of Educational Research and Pedagogy. In this study, we describe the implementation of Educational Methodologies to teach Design to Architecture Students in a Professional Degree Program in Mexico. This Methodology takes students from the familiarization with Design Fundamentals into the incorporation of internet technologies as a support tool that grants them access to an expanding database of form and geometry configurations. The incorporation of 3D Modeling Digital Tools complements a process that aims to endow students with the capacity to understand and create space from within the manipulation of form and geometry and promotes the burst of new formal configurations within the student's creative process. We base this process on the notions of Systems Theory and claim Design Teaching is a cohesive cluster of interrelated components. It is under this premise that we also claim that the new possibilities granted by Artificial Intelligence can be seen as another component within this system. Beyond the initial reluctance to incorporate AI to its Design Methodologies, the Design Disciplines should see AI as a tool that generates variations with radical speed, and therefore invaluable in its role as an aid to the Design process but nevertheless, incapable of generating new formal configurations by itself.

12:20-12:45

75210 | *Images As Catalysts: A Pedagogical Exercise Enhancing Writing Skills for First-Year PhD Design Students at the University of Porto*

Susana Barreto, University of Porto, Portugal

This paper introduces a pedagogical exercise that employs images as catalysts to facilitate the writing process for first-year PhD Design students at the University of Porto. The exercise pursues two fundamental objectives: firstly, to aid students in refining their research scope into a manageable territory, and secondly, to empower them to articulate the boundaries and intersections of their research, ultimately kickstarting their writing endeavors. The study has been carried out in the context of classes comprising approximately 10 students who were applying design methodologies to address problems beyond the traditional design realm, encompassing areas such as medical equipment and communication design. These students were in their first year and engaged in the discipline of Research Methodologies, this exercise served as a valuable tool to enhance their writing abilities. The exercise's significance arises from the acknowledged challenge design students encounter when attempting to articulate their thoughts in writing. Their cognitive processes are inherently visual, and they often interact with knowledge primarily through images. In the context of writing a PhD thesis, where proficient writing skills are a prerequisite, these images serve as catalysts and gateways to the writing process. The study employed a comprehensive methodology that involved retrospective observation, visual analysis, and interviews with the participating students. The anticipated outcome of this research is the development of a model for effectively conducting this pedagogical exercise, with the intention of aiding future design students in honing their writing skills by leveraging visual analysis as a valuable tool.

12:45-13:10

75981 | *Interactive Empathy: From Pixels to Profits – Revitalizing E-commerce Through Visual Design Education*

Yu Chun Liu, National Taiwan University of Arts, Taiwan

The study is motivated by the pervasive trend of internet-driven commerce and its evolving landscape. As e-commerce continues to change, the need to adjust instructional methods becomes clear. The focus is on transforming students into informed sellers, integrating experiential learning with market demands, and cultivating empathy through role shifts. The design process involves stages like market analysis, color formulation, design execution, A/B testing prototypes, trials, and iterative improvements. Notably, color formulation is pivotal, influencing initial visual appeal. Empirical findings confirm vibrant and contrast (v.s original market) colors' role in capturing attention and consumer attraction. In summary, this study advances interactive design and empathy to rejuvenate e-commerce. It aligns the mission of preparing students to navigate the dynamic e-commerce landscape, where aesthetics and empathy drive profitability.

13:50-15:30 | Room A

# Saturday Online Presentation Session 3

Teaching Experiences, Pedagogy, Practice & Praxis

## Session Chair: Susilawati Susilawati

13:50-14:15

75966 | *The Application of TPRS Teaching Method for Chinese as a Second Language Students*

Fang Huang, Rajamangala University of Technology Thanburi, Thailand

Piyanan Pannim Vipahasna, Rajamangala University of Technology Thanyaburi, Thailand

This study employs the TPRS teaching method to research elementary-level spoken Chinese instruction for foreign learners. It emphasizes moving beyond textbook content and focusing on cultivating students' oral output abilities. The purpose includes of this study were: 1) To applying TPRS in an experimental class for elementary-level spoken Chinese, comparing it with a control class, analyzing whether significant differences exist in oral test scores, assessing TPRS's suitability for basic oral teaching. 2) To assess satisfaction from using TPRS teaching method for Chinese as a second language students. The sample for this study included 44 undergraduate foreign students (aged 18-22) from Sichuan University of Science and Engineering. Students were selected using a simple random sampling technique. Each consisting of 45 students with no significant oral proficiency differences. Post-teaching, oral scores of both groups are compared. The findings showed that 1) Improved oral scores for both classes post-teaching, with significant differences favoring the experimental group, demonstrating TPRS's efficacy in enhancing oral proficiency. 2) The student's level of satisfaction toward the TPRS teaching method was at the highest level. TPRS aids vocabulary acquisition and real-world knowledge application.

14:15-14:40

75968 | *Augmented Reality Technology on Chinese Vocabulary Teaching for International Undergraduate Students*

Jiayi Zou, Rajamangala University of Technology Thanburi, Thailand

Piyanan Pannim Vipahasna, Rajamangala University of Technology Thanyaburi, Thailand

Studying basic Chinese as a foreigner poses challenges rooted in unfamiliarity with the language's characters and tones, compounded by cultural differences. These obstacles require the state-of-the-art learning material which encourages participation, stimulates attention, and retains learners' attention. This study deployed active leaning approach and examines the primary challenges faced by international students in Chinese character cognition and proposes the utilization of Augmented Reality (AR) technology in teaching Chinese vocabulary to address these difficulties. The research employs various methods, such as tests, surveys, interviews, and classroom observation records, to collect data. Through comprehensive analysis of these data, the effectiveness of augmented reality technology in Chinese vocabulary teaching is thoroughly investigated. The purpose includes of this study were: 1) To compare the pre-test and post-test results of students' Chinese vocabulary learning when augmented reality technology is employed and 2) To assess students' satisfaction with the application of augmented reality technology in Chinese vocabulary teaching. The research focuses on 35 undergraduate international students at Sichuan University of Science and Engineering. The findings reveal: 1) The students' achievement based on the average score of the posttest was higher than pretest significantly at the level of .05 2) Augmented reality-enhanced vocabulary teaching enhances teaching effectiveness, stimulates students' learning interests and enthusiasm, fosters increased interaction and communication among students and between students and teachers, thus aiding students in mastering vocabulary more effectively.

15:05-15:30

76099 | *Integrating STEM Education with Local Culture in Indonesia: Teachers' Perspective and Practice*

Susilawati Susilawati, Universitas Syiah Kuala, Indonesia

Hizir Sofyan, Universitas Syiah Kuala, Indonesia

Syahrul Ridha, Universitas Syiah Kuala, Indonesia

Sri Wahyuni, Universitas Syiah Kuala, Indonesia

Yopi Ilhamsyah, Universitas Syiah Kuala, Indonesia

STEM education based on local culture produces a more contextual and meaningful learning experience for students. However, the practical execution has led to numerous issues. The study aims to describe the challenges teachers face in implementing STEM education based on local culture and explore the teacher practice related to understanding and teaching strategies in STEM education. The total participants were 143 teachers who teach science, social, and other subjects. The data were collected by survey method and analyzed with descriptive statistics. The results show that 51% of teachers answered that integrating local culture into learning is essential because it can preserve local culture and introduce culture to the younger generation by presenting contextual learning. However, 59.4% of teachers have never applied STEM in learning, and 40.6% of teachers are still confused about its application, though they have heard of STEM before. The data indicated that the teachers faced many challenges regarding their understanding, practical constraints, teaching strategies, and STEM integrated with local wisdom. Notably, the findings show that most teachers have a lack of understanding of how to link STEM education and local contextual values. The strategy of integrating culture into learning is considered the most effective if it is done by developing teaching materials based on STEM. The implication of teaching strategies of STEM education related to local wisdom is discussed.

15:45-16:35 | Room A

# Saturday Online Presentation Session 4

## Curriculum Design & Development

**Session Chair: Fe Dullavin**

**15:45-16:10**

75246 | *Analysis and Development of the Content Structure of the Content Marketing Design Course Using the Design Thinking Process*

Jantakan Sathapornwachana, Muban Chom Bueng Rajabhat University, Thailand

Sumalee Chanchalor, King Mongkut's University of Technology Thonburi, Thailand

Komkrit Chomsuwan, King Mongkut's University of Technology Thonburi, Thailand

This content-structured training course was developed within the conceptual framework of design thinking. It puts the thinking system in the design of content marketing according to the stages of the design thinking process so that the learner will have a system of ideas in design and will be able to create effective content marketing. It is capable of designing high-quality work. In this study, issues were investigated and examined to ascertain the root cause of social business entrepreneurs' content marketing designs, tackle unsuccessful Content Marketing design issues, and use design thinking. A study and description of the steps involved in creating effective content marketing are available. And to include components of the Design Thinking process, such as its processes, methodologies, and tools, into the development and structuring of the instructional content. This course consists of 7 modules: 1) Concepts and principles of content marketing design 2) The process of content marketing design using design thinking 3) Empathizing with the target group 4) Defining the problem's framework in content marketing design 5) The process of generating ideas for content marketing 6) Making a content marketing project prototype 7) Testing and evaluation of content marketing projects. It was determined that the consistency, linkage, comprehensiveness, and appropriateness of this training content structure in relation to the anticipated learning goals were all at a satisfactory level during the evaluation process.

**16:10-16:35**

73622 | *Tracer Study on the Graduates of Bachelor of Science in Business Administration Batch 2020–2022: Basis for Curriculum Improvement*

Fe Dullavin, University of City of Muntinlupa & Cavite State University, Philippines

Ghiebert Son Octavio, University of City of Muntinlupa & Cavite State University, Philippines

Lurleen Lacuna, University of City of Muntinlupa, Philippines

This study discusses the results of the tracer study of the College of Business Administration Major in Human Resource Development Management, Marketing Management and Operations Management of Pamantasan ng Lungsod ng Muntinlupa who graduated from Year 2020 to 2022. The main objective of this tracer study is to determine whether the graduates have achieved the goals to be locally and globally competitive and whether it has effectively carried out the mission and vision of the school. Specifically, this study was designed to describe the demographic profile of the respondents, identify the opportunities for employment, determine the level and reasons of job satisfaction. Based on the findings of the study, majority are single, dominantly from Operations Management and graduated 2022 which rated themselves Very Good in Academics when they were students. From the information gathered, these graduates were employable as they got their first job after actively looking for it and time spent in looking for a job is not too long. Earning a monthly salary of more than P 15, 000 with a greater number assigned in a Private Companies and hired through media advertising. Most of them were satisfied on their job because of good working conditions and least of the reasons of being satisfied is a good prospect of promotion. The following recommendations may be considered for action: On the Level of Job Satisfaction Since respondents are satisfied with their present job, it is recommended for the company to continuously monitor the working conditions of the employees.

10:00-11:40 | Room B

# Saturday Online Presentation Session 1

Professional Training, Development & Concerns in Education

Session Chair: A. Michael Riskus

10:00-10:25

75267 | *Empowering Pre Service Training Programs: Optimizing Cooperating Teacher Engagement in Teacher Education*  
Julieta Fulgado, University of Rizal System, Philippines

This aimed to establish the implementation of the pre-service education program, identify the perceptions of cooperating teachers on the readiness and instructional competence of pre-service teachers; the level of personal relationships and reflective mentoring practices and the best practices of the teacher education institution. The research utilized a mixed method involving survey to gather specific data with open ended questions for free responses on the different aspects. A focus group discussion complemented the results and justify the data that need clarifications. The result was a much implemented Pre-service Training Program and no significant difference on their perceptions, the views of the pre-service teachers differ significantly on specialization attributing on the fact that pre-service teachers are in their initial period of exposure in the field. On the readiness, the pre-service teacher respondents are expected to perform during their training period and there is no significant difference on the level of readiness of the pre-service teachers except on Instructional Skills, although, rated as ready, the student-participants are evidently on the initial phase of trying out these skills into the actual classroom applications. Reflective mentoring practices are very much manifested and there is no significant difference on their perceptions of both respondents. Provisions of performance feedback was perceived to be the most needed aspect throughout the training. The components of the proposed designs of possible projects to address the instructional competency enhancement and specifically addressing the preparation of the Pre-service program through the creation of the University Guidebook for the Teacher Education Program.

10:25-10:50

73956 | *Teachers' Beliefs in the Context of Paternalistic Leadership and Educational Disadvantages in the Time of School Closures*  
Suqiong Zheng, University of Edinburgh, United Kingdom

When the pandemic forced school closures across the world, teachers were morally required to be at the front-line to cope with the unprecedented crisis. The challenges perceived by teachers differed across schools. This study specifically investigated teachers' beliefs of teaching and learning during the pandemic in a context of a school in China that caters for socio-economically disadvantaged student population. The response to school closures was designed by the gatekeepers in the selected research site, which can be an example of paternalistic leadership. It meant teachers from each school just followed to apply relevant policies into practice. The exploration of teacher belief involved semi-structured interviews on their perceptions of challenges and their corresponding actions. This study found that teachers were largely constrained by paternalistic leadership and students' family background, rather than by the immediate challenges emergent from school closures and online teaching. When participants found it impossible to break from structural constraints, they turned to emphasize three aspects: 1) Accountability in terms of students' learning outcomes; 2) Mian Zi (Face) in terms of leaving others a good impression when the teaching was online; 3) Wu Wei (Do Nothing) aiming to pursue "an in-between road, rather than doing something too good or something too bad" (Xing & Sims, 2012, p. 100). Therefore, this paper raises an urgent call to work on teachers' beliefs by removing certain structural barriers to the most extent, which is a key step to empower teachers or emancipate them from constraints, especially mentally.

10:50-11:15

75498 | *A Study on Instructional Design and Practical Experience of Asking Questions by Pre-service Teachers*  
Yu-Hsuan Liao, National Tsing Hua University, Taiwan  
Mei-Ju Chen, National Tsing Hua University, Taiwan

Education focuses more on pursuing the process of collective knowledge instead of developing individual knowledge with the education reform. Teacher questioning is regarded as a key to lead students talk and facilitate them to express them in interactive engagement to inquiry knowledge. This study explores how pre-service teachers design questioning in an online knowledge-building environment and implement these constructed questions to practical teaching. The participants are 47 students who are enrolled in the teacher education in Taiwan. A mixed method is adopted to comprehensively understand the design development of pre-service teachers' questioning and the effect of cognitive engagement of teachers' questions on primary school students. The content analysis is used to understand the changing types of teachers' questioning and the contingency table is for analyzing the changes in the number of questions asked during pre-posttest. The results indicate that (a) pre-service teachers diminish the quantity of convergent questions, while increasing the quantity of divergent questions subsequent to receiving ideas and peer feedback in the Knowledge Forum and (b) it is found that the average of asking questions by elementary students in the classroom is the lowest value. We suggest that teacher professional development in Taiwan should focus more on training educators to asking effective questions in order to improve the quality of teaching and learning.

11:15-11:40

76081 | *PLCs: An Alternative Approach to Professional Development*  
A. Michael Riskus, Rabdan Academy, United Arab Emirates

Effective professional development (PD) is critical to enhancing instructional practices and student achievement. Conventional PD often falls short because of limited duration, passivity, and lack of personalization. In response, Professional Learning Communities (PLCs) offer a dynamic alternative, promoting collaborative, ongoing, and job-embedded learning. This presentation explores an alternative approach to PD which has the potential to revolutionize teacher growth. Conventional PD models have demonstrated limited impact on teaching practices and student learning. To address these challenges, PLCs have emerged as a promising solution. These communities foster collaborative inquiry and action research among educators, grounded in the belief that continuous learning for teachers drives improved student outcomes. Key to PLCs' success is their commitment to principles such as active participation, coherence, sufficient duration, and teacher autonomy. Research has supported these principles, laying the foundation for PLC effectiveness. PLCs encourage teachers to collaboratively analyze student data, set specific goals, develop targeted strategies, and engage in ongoing reflective practices. The impact is profound: PLCs empower teachers, enhance teaching expertise, and align classroom practices with student needs. Through hands-on practice and shared decision-making, teachers take ownership of their professional growth. This transformative journey is characterized by its focus on learning, supportive relationships, and continuous improvement. PLCs thrive on shared goals, regular meetings, and a cyclical process of action research. They stimulate dialogue, experimentation, and reflection. This presentation invites educators to consider PLCs as an approach to professional growth and to embrace this dynamic model that fosters sustainable improvements in teaching and learning.

11:55-13:35 | Room B

# Saturday Online Presentation Session 2

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Mary Joy Somao-i

11:55-12:20

75041 | *Students' Learning Experience of a Pharmacy Curriculum Designed for Active Learning During the Pandemic, and Their Learning Expectation Post-pandemic*

Chooi Yeng Lee, Monash University, Malaysia

Suzanne Caliph, Monash University, Australia

Students' perceived effectiveness of remote online learning experienced during the pandemic, and their learning expectation post-pandemic were unknown. This study aimed to investigate students' perception of the effectiveness of online teaching and learning and assessment activities developed for active learning and pharmacy professional skills development. A cross-sectional online survey involving second-year pharmacy students of Monash Malaysia (MA) and Monash Parkville Australia (PA) campuses was conducted. The survey consisted of 15 Likert-scale multiple-choice questions and an open-ended question. Results were analysed statistically. Students at both MA and PA campuses were satisfied with the remote online learning experienced during the pandemic but indicated a preference for a blended learning approach involving both online and on-campus classes. MA students felt that on-campus face-to-face classes were more engaging and advantageous for their learning and skill development ( $P < 0.05$ ), and on-campus assessments allowed them to engage and perform better ( $P < 0.05$ ) compared with students at the PA campus who felt neutral or disagreed. Both cohorts were happy with some of the lectures to be conducted online synchronously or asynchronously. Differences in culture, learning behaviour and preference may influence learners' perceptions and expectations of online learning. In summary, this study suggests that blended learning involving both online and face-to-face interactive activities may promote engagement, satisfaction and outcomes of culturally diverse learner populations post-pandemic.

12:20-12:45

75828 | *Disengagement During Online Lectures: An Investigation of Media Multitasking, and Social Media Usage in Online Courses*

Jinming Du, University of Otago, New Zealand

With the popularity of technology use and the increasing need for lifelong education, a growing number of universities are offering online courses for undergraduate and postgraduate students to allow more convenient and flexible places and times for learning. Online learning is recognised to be 'accelerating the global competition and removing situational barriers' (Anderson, 2011, p.91). During the Covid-19 pandemic, many programmes besides distance learning courses have moved online, which has increased the popularity of online learning. Furthermore, the implementation of EMI (English medium instruction) is another method being used by universities to achieve greater internationalisation and globalisation (Tamtam, Gallagher, Olabi & Naher, 2012). From examining the basic information regarding online courses, it can be seen that the current situation of course delivery indicates that the technology not only brings convenience but also distractions to students (Szpunar et al., 2013). The main distractions are caused by students' mobile phones, which sometimes ring during classes or are used for chatting purposes (Campbell, 2006). This implies that students can find it hard to concentrate on the teaching content and engage in some task-unrelated activities (Dumford & Miller, 2018). Student's behaviours are influenced by the distractions in class, which can lead to disengagement. The present study will explore student disengagement, the factors influencing disengagement, and how disengagement affects students' academic performances in online courses.

12:45-13:10

75898 | *Confluence of Virtual Learning Environments and Virtual Reality Integration: An In-depth Study in Digital Animation Education for Acceptance Among Learners*

Ng Perng Jeu, Universiti Tunku Abdul Rahman, Malaysia

As innovation continues to reshape educational landscapes, this study delves into the intricate intersection of virtual learning environments and the integration of virtual reality (VR) within the realm of advanced animation education. Drawing from the latest advancements and methodologies, this research examines the convergence of learner perceptions and acceptance within this dynamic context. Through a comprehensive case-study approach, encompassing learner engagement and adoption patterns, this investigation sheds light on the intricate interplay between virtual learning environments and the incorporation of VR technology. The findings provide valuable insights into the multifaceted factors influencing learner acceptance, anticipation of learner experiences, educational effectiveness, and technological affordances. A total of 86 digital animation learners who completed questionnaires based on the Technology Acceptance Model (TAM) and the quality of the learning activity were included in this study. The students perceived the value of the training activity as significant, with substantial correlations observed among various dimensions. This research illustrates the potential of VR as an educational technology and offers fresh perspectives for future research. By synthesizing these technologies with real-world applications, this study contributes significantly to the scholarly discourse surrounding innovative pedagogical frameworks and optimal models, thereby promoting a deeper understanding of how learners embrace and engage with virtual reality in advanced digital animation education.

13:10-13:35

74557 | *College Students' Experience on the Local Government Policies in Distance Learning*

Mary Joy Somao-i, National University, Philippines

Danielle De Guzman, National University, Philippines

Joycelyn Gener, National University, Philippines

Many sectors have been affected because of quarantine protocols caused by COVID-19 including education sector. This study aims to extract if the role of the local government in rural areas in providing assistance through policy making in line with distance learning of tertiary education students were met based on the student experiences. Using mixed method specifically convergent design, quantitative data from survey and qualitative data from interview were utilized and synthesized. Target participants are from rural areas enrolled in tertiary education. Results shows that while many are making the most of what distance learning offers, local government are finding it tough to integrate high-speed internet facilities based from the respondents' experience. Moreover, students in rural areas must also deal with intermittent power supply, natural calamities, older electronic devices and household environment which are often a hindrance to seamless access and effective distance learning. There is significant relationship between distance learning class in rural provinces and the local government's efforts to invest in infrastructures that support technology usage. A call for more projects and policies supporting distance learning or blended learning especially technological based solutions were seen by the students as a need for the local government to take actions.

13:50-15:30 | Room B

# Saturday Online Presentation Session 3

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Francis Ankyiah

13:50-14:15

74265 | *Wayang: A Cultural Bridge to Inclusive Education Through Ethnopedagogy*

Esther Idayanti, STT International Harvest, Indonesia

Herman Poroe, STT International Harvest, Indonesia

Evinta Hotmarlina, STT International Harvest, Indonesia

Children with disabilities are often seen as different, which can make them targets for bullying. An ethnopedagogical approach to a more inclusive education can be achieved through wayang. Ethnopedagogy is an approach to education that promotes the use of culture in the educational process, which can be more effective, especially in transmitting values. Wayang is a traditional puppet shadow show or theatrical dance from Java, Indonesia, that is still a highly important part of Javanese and Balinese culture. Wayang performances serve not only as entertainment, but also as a means to transmit cultural values. Some wayang characters have disabilities, such as Batara Guru who rides on an ox due to his paralyzed leg, or Semar who is hunchbacked. These characters are often portrayed as wise and powerful people who play an important role in society. These disabled wayang characters can help students see that disability does not mean weakness or inferiority. Instead, they portray resilience, courage, and wisdom. By exposing students to wayang characters with disabilities, educators can help them develop a more positive understanding of disability, and thus create more inclusive learning environments. This paper presents a qualitative method using literature research with a narrative approach to the subject.

14:15-14:40

75790 | *Student Engagement and Learning Experiences in Different Types of Humanities Courses – A Comparative Case Study*

Shuguang Wang, UNC-CH, United States

Humanities Education plays an important role in cultivating students' abilities and preparing qualified citizens, and engaging learning experiences help students learn better. However, the nuances between different types of Humanities Courses lack attention. This study employed a comparative case study approach to gain more understanding of this issue. The researcher conducted in-depth interviews with three undergraduate students, each from a unique course in the Department of Asian and Middle Eastern Studies (DAMES) at a renowned university, and conducted the narrative analysis. Results include: 1) Students expected different learning outcomes from different types of humanities courses; 2) The voice of students in course design, cultural context woven into the course content, communications between the instructors and the students, and a supportive learning environment were crucial for an engaging class; 3) It's important to maintain communications between instructors and students to share potential issues like the difficulty level and the assignment workload.

14:40-15:05

73931 | *Lesson Design in Science Education and Its Correlation on Immigrant Students: A Case Study in Indonesian Schools in Sabah, Malaysia*

Diyah Rachmawati Tohari, Waseda University, Japan

SDG 4 aims to provide inclusive and quality primary and junior high school education to boys and girls. The Indonesian government has established a Community Learning Center (Center) in Sabah, Malaysia, to provide education to the children of Indonesian immigrants, in line with the national objective of enhancing the lives of its citizens. Furthermore, the Indonesian government initiated a program to deploy accredited teachers for the instruction of CLC students. Teaching immigrant students differs from teaching non-immigrant students. Several prior studies have demonstrated that well-prepared teachers significantly improve the academic performance of immigrant students. This study seeks to examine the correlation between the lesson design utilized by a teacher in the classroom and the academic performance of immigrant students. Levin's lesson design points will be a reference for this analysis. Science was chosen as it is a mandatory subject for the national examination. In the contemporary era of information and technology, the rapid growth of scientific knowledge and technological advancements underscores the critical importance of science and technology education for the future of societies. This study employs a mixed-methods design, with 103 instructors and 999 students as research subjects. According to the study's findings, student performance in the science lesson and the teacher's use of a learning design in the classroom are correlated. Recommendations were presented for educators of CLC students in Sabah, Malaysia.

15:05-15:30

73175 | *From Kente Cloth to Tapestry Art: Exploring the Intricacies of Cultural Hybridity*

Francis Ankyiah, University of Education, Winneba, Ghana

This study explores the concept of cultural hybridity through an examination of the similarities and differences between Kente cloth and medieval tapestries. Drawing on examples from Ghanaian and European cultural heritage, the study investigates the ways in which traditional art forms can adapt and evolve through cross-cultural exchange. The study highlights the intricate designs and patterns found in both Kente cloth and medieval tapestries and suggests that these similarities reflect a process of cultural exchange and adaptation. Through an analysis of the historical and cultural contexts in which these art forms emerged, the study demonstrates the unique complexities of cultural hybridity and the potential for cross-cultural dialogue. Overall, the study emphasizes the importance of exploring the intricacies of cultural hybridity in understanding the exchange of traditional art forms. It suggests that a deeper understanding of the similarities and differences between cultural artefacts can lead to new forms of artistic expression and cultural understanding, and can promote a more inclusive and diverse cultural heritage for future generations.

15:45-17:25 | Room B

# Saturday Online Presentation Session 4

Learning Experiences, Student Learning & Learner Diversity

Session Chair: Jerrecho Pituk

15:45-16:10

72807 | *Parental Involvement and Adolescents' Academic Achievements in China: A Cross-Lagged Analysis*

Yushan Jiang, The University of Hong Kong, Hong Kong

Chen Meng, The University of Hong Kong, Hong Kong

Using two waves of longitudinal data from the China Family Panel Studies (CFPS) with 523 Chinese adolescents (Mage= 10.50, SD= .575, girls=239) and their parents, this study examined the effects of parental involvement (including parental academic expectations, educational expenditure, and learning support and monitoring) and socioeconomic status (SES) on adolescents' academic achievement in literacy and mathematics. In particular, the study aimed to 1) examine cross-lagged relations between parental involvement and adolescents' achievements in literacy and mathematics while taking into account the effect of SES, and 2) investigate whether urbanicity and gender moderated the paths between parental involvement, SES and academic achievement. Two separate structural equation models were constructed for literacy and mathematics. The results found significant positive bidirectional relations between academic achievement and parental expectation in both literacy and mathematics models. Positive reciprocal relations were also significant between mathematics achievement and educational expenditure. Multi-group analyses were performed on the cross-lagged models to examine the moderation effect. The results suggested that rural families adjusted their academic expectations based on students' early literacy and mathematics performance, while urban families did not. Furthermore, the reciprocal relations between mathematics achievement and educational expenditure were only significant for boys, but not for girls. Parental expectation was associated with girls' later mathematics achievements, but not boys'. The findings further unpacked the relations between parental involvement, SES, and academic achievement among Chinese students, and shed light on the importance of contextual factors such as urbanicity and gender. Implications for promoting education equity will be discussed.

16:10-16:35

76007 | *Teachers' Challenges in Supporting Child-Centred Learning*

Masayu Dzainudin, Sultan Idris Education University, Malaysia

Ilyia Dayana Shamsudin, Sultan Idris Education University, Malaysia

Faridah Yunus, UNIRAZAK, Malaysia

Azizah Zain, Sultan Idris Education University, Malaysia

Abdul Halim Masnan, Sultan Idris Education University, Malaysia

This fundamental study explores the challenges faced by early childhood educators to divert their teaching approach from teacher-directed to child-directed in Malaysia's preschools. Research has shown that child-centred means 'the children direct their own activities, while their teacher provides them with the conditions to do so' (Shoval et al, 2014: 280). However, it is a challenge for educators in countries that have strong practices teacher-centred to develop a child-centred approach (Greaves & Bahous, 2021). The theoretical framework of this study draws on Reggio-inspired approaches based on the socio-cultural of the country (Emerson & Linder, 2021), as well as the zone of proximal development (Vygotsky, 1978) with minimal assistance instead of direct learning and instruction by teachers. The study adopts the naturalist paradigm to understand teachers' challenges in supporting child-centred. The naturalistic observation of 5 preschool teachers and 15 children in different preschools was done to discover the phenomenon of the teaching practices. Content analysis was conducted to analyse the themes. A consent and assent form was provided for teachers and children respectively. The participants were allowed to withdraw at any time prior to the observation date. The permission letter to enter the preschools has been granted by the preschools' authority. The findings illustrate that teachers attempt to minimise directing, controlling and instructing children's learning process. However, in the quarter of the learning time, teachers tend to back to teacher-centred due to children's academic achievement requested from parents. These findings suggest implications of supporting child-directed in enriching children's academic performance achievement.

16:35-17:00

75958 | *Forgetting Green Biographies: Memories and Relationship with Plants in a Primary School*

Rosa Buonanno, University of Modena and Reggio, Italy

Beate Weyland, Free University of Bolzano, Italy

The research we present here has as its theoretical framework the relationship between education and nature promoted by Monica Guerra (2018) and Beate Weyland's interdisciplinary studies dealing with playful and sensory interaction with plants (Weyland 2022). Through the approach of Ethnobotany (Caneva, 2013), the researchers investigated on the relationship of a community of children, parents and teachers with plants. Moreover, this interconnection seems to influence their lives and culture. In particular, it is proposed to trace how the relationship developed by children and adults with plants sustains various 'oral traditions and expressions, including language as a vehicle of intangible cultural heritage' (UNESCO, 2003). Research confirms that it is essential for humans to learn to establish relationships with nature to improve their wellbeing and personal skills (Sumana Roy 2022; Lucy Jones 2020, Raith and Lude 2017). The aim of this research and educational practice, is to highlight a 'green biography' that emphasises the importance of learning, understanding and knowing through nature in order to relate to context, space, objects, memories and living beings. In this study, we present data collected in a primary classroom with 9-year-old children through conversations and interviews. The thematic analyses reveal the possibility of developing diverse and beneficial relationships with the natural world. Green memories support a new kind of re-connection with their children and school. The discussion focusses on the goal of using green biographies to introduce a new educational approach that stimulates awareness about the holistic essence of human being in connection with nature.

17:00-17:25

75165 | *Exploring the Online Learning Experiences of College Students with Full Online Physical Education Course*

Jerrecho Pituk, De La Salle-College of Saint Benilde, Philippines

Ace Domingo, De La Salle-College of Saint Benilde, Philippines

Adrian Somido, De La Salle-College of Saint Benilde, Philippines

This phenomenological study aimed to investigate the lived experiences of college students in full online Physical Education (PE) courses when higher education institutions (HEI's) were forced to switch into online modalities. The researchers were interested in understanding how students adapted to online PE courses, despite the nature of PE requiring physical contact, interaction, and collaboration. To guide their investigation, researchers utilized the Transactional Distance Theory (TDT), which focuses on how factors like communication, course structure, and learning autonomy influence the students' experiences in this context. Data were collected through one-on-one interviews with twelve students who had taken at least two full online PE courses in one private HEI located in Manila, Philippines. Triangulation was employed to enhance the validity and trustworthiness of the findings. Thus, aside from interviews, document analysis and observations of both synchronous and asynchronous classes were employed. Four super-ordinate themes emerged from the analysis of data, namely: (a) challenges in full online PE, (b) communication within the online learning community, (c) independent learning experiences, and (d) meaningful online PE experience. Through these findings, researchers suggest ways for educators and institutions to enhance their online PE offerings and support students' engagement and success in remote PE settings.

10:00-11:15 | Room C

# Saturday Online Presentation Session 1

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Ed Sykes

10:00-10:25

75554 | *Exploring the Potential of Using AI Language Models in Democratizing Global Language Test Preparation*  
Amalia Novita Sari, Sagara Abhipraya (SA) Edu Lab, Indonesia

This paper delves into the potential of AI language models for democratizing global language test preparation, focusing on the accuracy and consistency of assessment in the context of IELTS writing essays. Through a quantitative study, we compare the assessment scores generated by a Human Examiner (HE) and four AI Language Models: ChatGPT, Google Bard, Writing9.com, and Upscore.ai. The former two models are generative NLP systems, while the latter two are tailored specifically for evaluating IELTS essays. Evaluation is conducted using Mean Absolute Errors (MEA) and Bland Altman analysis. The findings reveal varying levels of accuracy, with Upscore.ai showcasing the lowest MEA of 0.5, followed by Google Bard at 0.85, ChatGPT at 0.9, and Writing9.com at 1.9. Bland Altman Plots provide a visual representation of the agreements between each alternative evaluation system and the Human Examiner, shedding light on their alignment. These results hold significant implications for assisting IELTS test takers in their preparation efforts and advancing the democratization of IELTS and global language assessment by harnessing AI technology to provide more accessible and consistent evaluation methods.

10:25-10:50

75364 | *An AI-Enabled Learning System with Personalized Learning Pathways: A Pilot Study of Its Impact on Learning of Statistics*  
Poh Nguk Lau, Temasek Polytechnic, Singapore  
Steven Chee Kuen Ng, Temasek Polytechnic, Singapore  
Li Fern Tan, Temasek Polytechnic, Singapore

AI-enabled systems offering personalized learning pathways are gaining imminence with their capability to meet diverse learners' needs at-scale. In this work, we piloted an off-the-shelf learning resource that offers personalized learning pathways (termed as LeaP), an adaptive learning tool integrated within the learning management system (LMS). LeaP comprises a mapping engine, a ranking engine and a recommendation engine. Semantic algorithm enables LeaP to dynamically determine content relevancy against quiz performance at the diagnostic or post-study phases, offering suitable learning resources embedded within the LMS to close learning gaps just-in-time. A LeaP revision unit was designed in a freshman statistics course to prepare learners (n = 357) for an Excel skills test in linear regression in the October 2022 semester. The variables analyzed were the Excel test scores, extent of LeaP completion (engagement levels) and prior ability measured by the preceding semester Grade Point Average (GPA). Using non-parametric statistics, it was found that amongst LeaP users, levels of engagement were not differentiated by GPA, indicating the choice of LeaP usage was not motivated by prior ability. However, the greatest and significant score differences were found between non-LeaP learners and those who fully completed all the LeaP quizzes, with higher scores favouring the latter. At-risk learners had poorer engagement levels and test performance compared to non-at-risk peers, which warrants a closer look at how intelligent tutoring systems (ITS) should be designed to meet their needs in online learning environments. Limitations and suggestions for future implementation and research were also proposed.

10:50-11:15

75856 | *AI-Assisted Academic Writing: A Comparative Study of Student-Crafted and ChatGPT-Enhanced Critiques in Ubiquitous Computing*  
Ed Sykes, Sheridan College, Canada  
Roland Van Oostveen, Ontario Tech University, Canada  
Wendy Barber, Ontario Tech University, Canada

This research investigates the impact of Large Language Models (LLMs), such as ChatGPT, on developing academic critique skills among Computer Science undergraduates taking a fourth-year Ubiquitous Computing course. Each week in the course, during the fall of 2023, students will be tasked with critiquing two academic papers. Initially, critiques are authored without any assistance from ChatGPT and assessed, forming a baseline for comparison. Subsequently, students interact with ChatGPT to enhance their critiques, and these revised versions are saved and assessed. The study aims to evaluate and compare the differences between student-authored critiques and those co-authored with ChatGPT's assistance. The methodology incorporates an iterative process of independent writing and AI-assisted revision, offering a comprehensive examination of how LLMs contribute to improving academic writing and critiquing skills. Evaluations are conducted objectively using widely accepted tools such as the System Usability Scale and readability metrics like the Flesch Reading Ease Score, Gunning Fog Index, among others. The research promises to shed light on the potential role of LLMs in enhancing students' critical thinking and writing abilities, providing valuable insights into integrating AI tools within educational practices. It also explores the transformative potential of AI-driven tools in supporting student learning and fostering a more personalized and engaging process of academic critique. Furthermore, the findings of this research have broad implications for the learning sciences, pedagogy, and educational technology. They provide actionable insights into how AI can be harnessed to augment traditional learning methods, foster critical thinking, and personalize education.

11:55-13:35 | Room C

# Saturday Online Presentation Session 2

Design, Implementation & Assessment of Innovative Technologies in Education

Session Chair: Pedro Alves

11:55-12:20

76039 | *Empowering Interactive Learning and Educational Transformation Through Rapid eLearning Development Tools: A UAE-Based Case Study*

Sabir Haque, American University of Ras Al Khaimah, United Arab Emirates  
Bryn Holmes, American University of Ras Al Khaimah, United Arab Emirates  
Linzi J Kemp, American University of Ras Al Khaimah, United Arab Emirates

How can we effectively impart change management knowledge to students in business disciplines, residing in one of the world's most rapidly evolving nations? We argue that the answer lies in seamless, intuitive rapid development tools deployed for effective teaching and interactive learning. Our study illuminates the early stages of the transformation involving a microlearning module centered around 'change management.' Leveraging rapid development tools that resonate with andragogical principles in higher education pedagogy, we devised this module for units within both undergraduate and graduate business courses. Situated within the higher education pedagogical framework, this paper presents a compelling case study that emanates from the UAE. The UAE's distinctive feature lies in its remarkable journey from its inception as a fledgling nation with virtually no paved roads to its present stature, marked by monumental events like EXPO 2020. Through the strategic infusion of interactive elements and assessments into asynchronous learning materials, the research probes the amplification of student engagement and comprehension across diverse educational contexts. Drawing from an exploratory methodology, this study delves into the multifaceted contributions of rapid eLearning tools in achieving comprehensive learning objectives and igniting a transformative shift in education. The outcomes derived from this inquiry provide valuable insights into the pragmatic application of these tools within higher education. This knowledge is poised to cater to the needs of educators and institutions aiming to harness technological innovations to augment the effectiveness of teaching and learning endeavors.

12:20-12:45

73980 | *Teaching in the Metaverse: Systematic Review of Virtual Reality Solutions for Higher Education*

Tommaso Santilli, University of Macerata, Italy  
Catia Giaconi, University of Macerata, Italy  
Silvia Ceccacci, University of Macerata, Italy  
Ilaria D'Angelo, University of Macerata, Italy  
Noemi Del Bianco, University of Macerata, Italy

Scientific literature has shown how the evolution and spread of information and communication technologies (ICTs) has impacted the world of education in terms of approaches, methods and tools, creating a constant renewal of teaching and learning processes. In this transformation context, the use of virtual reality (VR) in education has become increasingly popular, and many researchers have started to develop and analyze VR-based solutions for higher education, also in metaverse environments, by comparing VR-based teaching methods with traditional ones. However, limited research has offered an overview of these comparative studies yet, leaving a wider analysis on the possible fields of applications and learning outcomes of VR still unexplored. The aim of this systematic literature review (SLR) is to deepen the understanding of VR and metaverse's potential benefits and limits in higher education. Based on the analysis of the results of the considered papers, selected on the basis of inclusion/exclusion criteria, this review aims to identify the disciplinary fields in which VR technologies have been most widely used so far, and to determine which teaching methodologies are best suited to support learning in virtual environments, so as to the potentials and limits of VR to enable inclusive education for people with special education needs. The results will contribute to an increased knowledge on how VR technologies are being applied in education and their degree of inclusivity.

12:45-13:10

75341 | *Analysis of the Impact of Project "Insert" on Primary and Secondary Education Teachers in Portugal*

Pedro Alves, Universidade Católica Portuguesa, Portugal

"Insert" is a film education project funded by Fundação para a Ciência e Tecnologia (Portugal) and developed from January 2022 to July 2023. Its aim was to create digital resources on film theory and practice for teachers and students in peripheral areas of Portugal. It aimed to reduce territorial, social and cultural asymmetries and encourage a more open, inclusive, flexible and autonomous access to this type of methodology. Throughout the project, 20 videos, 1 pedagogical notebook and 1 website were produced. In addition, 13 hours of training were offered to 55 teachers - from the five schools where the project's pilot implementation was carried out (in northern Portugal) - on how to use the resources in educational contexts. After monitoring the activities that followed in schools, teachers were asked to fill out a questionnaire on: objectives, expectations and motivations for participating in the project; effectiveness of "Insert" resources (videos, pedagogical notebook and website); and critical assessment of learning, activities, knowledge and skills developed. The analysis of the 44 teachers' responses allowed us to conclude high levels of satisfaction and effectiveness of the project, showing an increase in motivation, knowledge and future predictions for new projects and educational activities involving cinema. It also enabled the project to improve its resources and resolve some of the weaknesses identified, bringing them closer to the sensitivities of those who, in the future, will contribute most to expanding the implementation and impact of "Insert".

13:10-13:35

75614 | *The Use of Virtual Tabletop for Revising Electron Counting in Inorganic Chemistry*

Maw Lin Foo, National University of Singapore, Singapore  
Su Ying Jillian Goh, National University of Singapore, Singapore  
Hafizah Osman, National University of Singapore, Singapore  
Wee Han Ang, National University of Singapore, Singapore

Electron counting of transition metal complexes is an essential concept taught in year 2 inorganic at the Department of Chemistry, NUS. We have previously developed a physical card game termed "CountQuest" for revising electron counting in the fall of 2019. In 2020, due to the COVID-19 pandemic, the game was moved online and played using the annotate feature in Zoom with preset card decks. However, this arrangement was cumbersome and difficult to track the card "played" by each online player. Thus in 2021, we used a free virtual tabletop website, "playingcards.io" to implement the online version of CountQuest. Playingcards.io provides highly customizable game rooms and board/card games for online players. The interface of each game room is such that the game mechanics is very similar to a face-to-face experience. The playingcards.io version of CountQuest was piloted with 79 students in several one-hour tutorial sessions playing in groups of 4-5. Pre and post-game survey indicates that similar to the past two iterations, CountQuest greatly increased the students' confidence in electron counting from 33% to 73%. Pre and post-game quizzes demonstrated that at a 95% significance level, the students' scores have improved. A large majority of students (80%) surveyed felt that it was easy to play the game in playingcards.io and the layout of the virtual playing area was clear. The results are encouraging and suggest that virtual tabletop websites such as playingcards.io can be used to facilitate effective online pedagogy even as the world emerges from the pandemic.

13:50-15:30 | Room C

# Saturday Online Presentation Session 3

Interdisciplinarity & Learning Productivity Development

Session Chair: Mikako Nobuhara

13:50-14:15

74932 | *Thinking Aloud Protocol Based Self-Report Questionnaire to Measure Metacognitive Skills in Mathematical Problem Solving*

Uthpala Athukorala, Institute of Technology University of Moratuwa, Sri Lanka

Chanakya Wijeratne, University of Colombo, Sri Lanka

Dileepa Fernando, Sri Lanka Technological Campus, Sri Lanka

Metacognitive skills play a major role in Mathematical problem solving. Metacognitive skills are required for monitoring and regulating the cognitive process of Mathematical problem solving. Different countries have declared that improving metacognitive skills is an essential component in Mathematics Education. Hence, having an instrument to effectively and efficiently measure metacognitive skills is important for both researchers and teachers. Think-aloud protocol is an endorsed method for assessing metacognitive skills in Mathematics. There, students verbalize their thoughts while working on the problem. However, this method has limited usability in large classroom settings due to the time consumed. Self-report questionnaires, on the other hand is an efficient metacognitive skill measurement instrument since it has ease of administration, suitable for larger classes and no need of special training on conducting. Though task general self-report questionnaires show low correlation with think-aloud which is an effective metacognition measurement tool, task specific questionnaires which were designed in line with think aloud show a significant correlation. To this date, there is no self-report questionnaire designed based on think-aloud for measuring metacognition in Mathematical problem solving. This study focuses on developing a task specific Likert type questionnaire for measuring metacognitive skills in Mathematical problem solving based on think aloud. The scale shows a high content validity ( $S-CVI/Ave=0.9$ ), confirms the construct validity including both convergent and discriminant and higher internal consistency (ordinal  $\alpha=0.89$ ) assuring it as a successful measure for measuring metacognitive skills in Mathematical problem solving.

14:15-14:40

75845 | *The Role of ChatGPT in Improving Learning Productivity of Higher Education Students: A Case Study for Oman College of Management*

Sarah Attia, Oman College of Management and Technology, Oman

Elsayed Elsayy, Sultan Qaboos University, Oman

Purpose: This study aims to determine the role of ChatGPT in enhancing learning, foster skill growth and improve productivity. It also aims to identify how the students of OCMT can use ChatGPT, its advantages and challenges keeping in mind the ethical considerations. Study problem: The problem of this study emerged in the researchers' desire to explore the degree of students' use of ChatGPT, the advantages of using it, the obstacles, challenges and ethical considerations that may affect its integration in education. Methodology: The study uses the descriptive analytical approach to provide an overview of the use of Chat GPT tool in artificial intelligence-based eEducation. The researchers conducted an online survey for the students of OCMT. The survey showed that the most AI application used by students is ChatGPT at a rate of 65%, and that the most learning activity that students depend on using Chat GPT is searching for information to understand topics in the curriculum at a rate of 100%. Originality & Value: It is hoped that the results of this study will contribute to the existing literature in AI by examining thoroughly the benefits of incorporating ChatGPT into higher education institutions in Oman. However, the study also acknowledges the need to address potential challenges and ethical considerations associated with ChatGPT implementation.

14:40-15:05

75960 | *Enhancing Mathematics Classroom Teaching Through Micro-Lessons and Increased Learning Interest*

Xiaomin Zhou, Rajamangala University of Technology Thanyaburi, Thailand

Piyanan Pannim Vipahasna, Rajamangala University of Technology Thanyaburi, Thailand

This research discusses how to strengthen the teaching of mathematics class by using micro-lessons and improve students' interest in learning. In order to solve these problems, this study puts forward the application of micro-lesson in mathematics teaching. The needs analysis is carried out in advance with the aim of stimulating students' perceptions of learning using micro-lessons. The purpose includes of this study were :1) To identify the efficacy of the proposed micro-lesson on mathematics classroom learning. 2)To compare students' learning achievement through pre-test and post-test the micro-lessons to study mathematics and 3) To assess satisfaction from using micro-lessons. The sample for this study included 30 third-grade students studying in a private school in Guangdong Province. Students were selected using a simple random sampling technique. The data were analyzed using mean, standard deviation and t-test. The findings showed that 1) The efficacy of the proposed system (E1/E2) were at levels greater than 80 percent. 2) The students' achievement based on the post-test was higher than pre-test significantly at the level of .05. 3) The student's level of satisfaction toward the system was at the highest level. The results show that the micro class is beneficial to the learners' interest in mathematics. The application of micro-lessons in mathematics classroom teaching reduces learners' anxiety in mathematics learning, and there is a significant difference between the experimental group and the control group.

15:05-15:30

75561 | *Practice of Classes for Helping Deepen Japanese Students' Consideration of Communication Utilizing the Film, Top Gun Maverick Using Google Classroom*

Mikako Nobuhara, Nagaoka University of Technology, Japan

Takashi Okoda, Tokyo Metropolitan College of Industrial Technology, Japan

College students in Japan typically take English classes to improve their language skills, primarily listening, reading, speaking, and writing. In this study, two class practices were conducted at a Japanese metropolitan college and a national university to encourage students to deeply think about communication between characters in the American film, "Top Gun Maverick". The students viewed the film and responded to questions about communication issues, problem solving for better communication, and character relationships. They also expressed their comments via Google Forms and discussed everyone's ideas via Google Classroom. The questionnaire, which was distributed following the classes, yields positive results in learning communication through film. Most students approved of the class design, and this activity has the potential to encourage students to deeply think about communication and their future language acquisition.

15:45-17:00 | Room C

# Saturday Online Presentation Session 4

Innovative & Interdisciplinary Teaching in Practice

Session Chair: Alvin Leong

15:45-16:10

71660 | *Installation Arts in Teaching Genetic Concepts*

Saturnino Jr Macasinag, Ligao National High School, Philippines

Shiela Arroco, Bicol University, Philippines

This study aimed to come up with lessons in Genetics using Installation Arts for Senior High School students. It employed pre-experimental, one-group pretest – posttest design, which implied a complete enumeration of 38 Grade 12-STEM2 students of Ligao National High School, for school year 2018 – 2019. Specifically, it aimed to answer the following questions; (1) What lessons in Genetics can be developed using installation arts with the following features: a) arts integration, b) collaborative learning, c) representation of concepts and d) inquiry-based? (2) What tangible physical representation of concepts can students create using installation arts? and (3) What are the effects of the developed lessons using installation arts to students in terms of: a) conceptual understanding, b) development of 21st-century learning skills and c) Science-related attitudes? Based on the result of the study, three lessons in Genetics, namely: (a) Non-Mendelian Modes of Inheritance, (b) Sex-Related Inheritance and (c) DNA Replication using installation arts were developed incorporating art integration, collaborative learning, representation of concepts and inquiry-based learning as its features. Moreover, students were able to create ten tangible physical representations of the concepts in Genetics which were competency-based. Furthermore, based on the analysis of the results of the pretest and posttest, it revealed that there is a significant difference in students' conceptual understanding with a p-value of .000 which implies a highly significant difference under .05 confidence level. Finally, the lessons using installation arts developed students' 21st-century learning skills and science-related attitudes.

16:10-16:35

74796 | *Zen-Mind Filmmaking – A Pedagogical Approach to Liberate Filmmakers from Conditions and Entangled Dependence*

Tzang Merwyn Tong, Republic Polytechnic, Singapore

As a practice, filmmaking involves the interplay of many several disciplines to create a final finished product. Because filmmaking is so conditional and dependent on resources like finance, equipment, cast and crew, filmmakers often gets entangled in the acquiring of them, leading to fatigue and exhaustion. In trying to liberate filmmaking from its entanglements, a practice research experiment was conducted to see if the filmmaking practice can be improved using the parameters inspired by Zen Buddhist philosophy. This experiment worked with 3 filmmakers to make films, using Zen concepts like minimalism, non-attachment and being in the present to reduce filmmaking's dependence on funding and equipment, adopting a minimalist less-is-more approach to storytelling with the moving image. By limiting shoot and edit time to 4 hours each, filmmakers practice non-attachment to fixated ideas and learn to use the "thus-ness" of their conditions in the present, opening themselves to modes of serendipity and sometimes co-creating with their conditions, however unfavourable to tell stories. The experiment also revealed that films made under these parameters focused less on image building and more on the image's relations to rhythm, pacing, space and duration. Despite imposed parameters, Zen-Mind Filmmaking is found to be liberating rather than limiting. Like how Zen practice brings a practitioner back to his center, this methodology can be introduced to film education to help bring the practice of filmmaking back to its center – as storytelling with the moving image – without its excesses.

16:35-17:00

74085 | *Exploring Interdisciplinary Academic Literacy via a Faculty Learning Community: Designing a Rubric*

Mia Huan Tan, Nanyang Technological University, Singapore

Alvin Leong, Nanyang Technological University, Singapore

Yew Boon Chia, Nanyang Technological University, Singapore

Jia Xuan Ho, Nanyang Technological University, Singapore

Sandra Lam, Nanyang Technological University, Singapore

Lena Sam, Nanyang Technological University, Singapore

Developing academic literacy skills through interdisciplinary teaching and learning in higher education will require a shift in pedagogical design and approaches. To gain a clearer understanding of what academic literacy skills are required for interdisciplinary teaching and learning for undergraduates, and to evaluate the learning development of learners through our teaching approaches, we formed a Faculty Learning Community (FLC) to explore how students develop interdisciplinary academic literacy skills through collaboration in interdisciplinary teams. FLCs are collaborative groups of faculty and staff engaged in a structured and sustained professional development programme designed to foster development in pedagogical innovation and enhance student learning. The aim of this paper is to describe the process of designing an interdisciplinary academic literacy rubric carried out in three phases over a period of 18 months. In the first phase, members of the FLC, comprising four faculty and two librarians, met monthly to study interdisciplinarity and academic literacy skills through discussing related literature which formed the background information for the first draft of the rubric. A competition was organized in the second phase, where students formed interdisciplinary teams of four to pitch a proposal in which they designed an innovative solution to solve a real-world problem. We collected data in the form of reflection blogs and surveys to gather students' collaborative process. In the third phase, the documented data was used to revise the descriptors in the final rubric. We believe the rubric has the potential to inform curriculum development and course design for the academic community.

10:00-11:40 | Room D

# Saturday Online Presentation Session 1

Education Development: Policy & Experiences

Session Chair: Alexandra Vasile

10:00-10:25

75389 | *A Comparative Analysis of Teachers' and Students' Perceptions Regarding Code-switching in EFL Classrooms: The Challenges, Pros, Cons, and Possible Opportunities*

Qingzeg Zhuoma, Qinghai University, China

Suri Guga, University Sains Malaysia, China

This research investigated the perceptions of both teachers and students on the use of code-switching in English as a Foreign Language (EFL) classrooms in inner Mongolia and Tibet regions in China, providing evidence of the challenges, pros, cons, and possible opportunities of the usage of code-switching in EFL classrooms. Both quantitative and qualitative data collection methods through questionnaires were employed to address the research questions. Surveys were conducted on fifty Tibetan English language learners (TELLs), six EFL teachers in the Tibet region, and fifty Mongolian English Language Learners (MELLs), nine English teachers in Inner Mongolia, and were analyzed using both descriptive and inferential statistical techniques and thematic analysis. The findings revealed that all teachers utilized code-switching in their teaching practice primarily when teaching grammar for clarification purposes, and the potential negative consequences of code-switching are predominantly denied by learners from both areas. This study contributes to the growing line of research on code-switching in EFL classrooms in multilingual contexts and highlights the need for further research on the different perceptions held by teachers and students. The findings suggest that a more nuanced use of code-switching will bring more opportunities for improvements in English language learning.

10:25-10:50

73584 | *Bilingual Education Policy and Practice: Teacher and Student Experiences of Bilingual Education in Sri Lanka*

Udumbara Samarakoon, Hiroshima City University, Japan

Bilingual Education (BE) was first introduced to Sri Lanka in 2001 by offering English medium instruction for a few selected subjects. The goals of this project were to allow all children to acquire adequate proficiency in English for higher education and career advancement, to provide equitable education for all children irrespective of socioeconomic and/or regional disparities and to promote social harmony and social cohesion in ethno-linguistically diverse Sri Lanka. The project has expanded over 7% of schools across Sri Lanka, and further expansion is currently being considered. However, some recent studies show that the project fails to fully deliver its objectives. Lack of clarity and well-designed policies are identified as major drawbacks of the BE system. This presentation discusses an ongoing study designed to explore bilingual education in Sri Lanka from the perspectives of teachers and students. A qualitative multiple case study was undertaken at three Sri Lankan schools. The findings suggest that, while the BE programme may be leading to self-reported improved English proficiency gains for the small number of students, this is limited as the number of students who are accepted on the programme is typically about 2% of the entire student population. The study also identifies systemic factors in both the school system and bilingual programme and a lack of governmental support for schools as problematizing to all three programme goals. This presentation will offer some potential, practical solutions for programme improvement.

10:50-11:15

76145 | *Teachers' Voices on the Integration of Content and Language in a Business English Programme in China: Through a Pluriliteracies Lens*

Zixiang Yu, The University of Edinburgh, United Kingdom

The Business English (BE) programme is traditionally defined as a branch of English for Specific Purposes (ESP). By problematising ESP in such a scenario, this research takes a Content and Language Integrated Learning (CLIL) perspective to examine a common dilemma many BE programmes face – integration (Wang & Ge, 2016). It addresses three research questions: 1) BE teachers' perceptions of integration of business content and English, 2) their self-reported practices of integration, and 3) their perceived challenges of integration. Using a qualitative case study, this study aimed to understand teachers' voices on integrating content and language in BE teaching by interviewing ten teachers and conducting a reflective thematic analysis (Braun & Clarke, 2006). The study found that 1) teachers emphasise the importance of integration for its merits. However, they argue that many students lack an integrated mindset due to various reasons; 2) teachers' pedagogic integrated teaching is designing integrated tasks, scaffolding learning, and assessing learners' learning outcomes; 3) teachers' perceived challenges are lacking competence, insufficient collaboration, and scarce resources. A key contribution of this study is that it bridges the gap – a contextualised CLIL in China, especially in BE programmes. This research also highlights the need for school-based teachers' professional development (PD) informed by the increasingly momentous pluriliteracies approach to enhance integration.

11:15-11:40

76071 | *Using Peer Feedback to Motivate and Shape Pre-service Teachers' Critical Reflection*

Alexandra Vasile, University of Arkansas, United States

Alexandra Anton, Abo Akademi University, Finland

The presentation reports the results of implementing a peer feedback strategy in an pre-service teacher program. We examine the awareness and perspectives of 38 pre-service teachers on providing and receiving feedback from their peers on their project ideas, particularly their motivation and readiness to assimilate feedback. Data includes initial and final project ideas, answers to reflective questions, and the peer feedback each participant received. Data was analyzed using an inductive/deductive hybrid thematic analysis, which Fereday and Muir-Cochrane (2006) demonstrated to be of great rigor through its mutual reinforcement. We designed a template based on the research question and the theoretical framework, and we then coded data and identified the themes in an iterative and reflexive process, and finally, we numerically summarized data by counting the number of observations in each dimension impacted by peer feedback. The study finds that teacher candidates show increased awareness of peer feedback's impact on their final project ideas and positive shifts in perspectives regarding their ability to implement project-based learning in their future classrooms. Studies show that peer feedback in teacher education is beneficial. However, teacher candidates often lack opportunities to learn from each other and perfect the way they provide and perceive feedback. This need is especially critical and relevant when learning about and implementing civic education practices, which is the focus of the study. The study findings discussed in this study fill a gap in current research, by exploring how guided reflection that pre-service teachers to approach their learning and ideas critically.

11:55-13:10 | Room D

# Saturday Online Presentation Session 2

Education and Contemporary Development Issue

**Session Chair: Naomi Tsunematsu**

**11:55-12:20**

76103 | *A Social Privilege Simulation Game*

Sabrina Fontanella, Sapienza Università di Roma, Italy

Alan Mattiassi, GAME Science Research Center, Italy

Giulia Comuzzi, University of Udine, Italy

Baldissin Nicola, University of Udine, Italy

This study introduces a game for social change designed to allow players to observe and understand the concept of gender privilege and its mechanisms. The game was developed in collaboration between Sapienza University of Rome and The Business Game srl, a company specialising in designing educational games and business simulations. The primary objective of this game is to enable managers and students to closely observe and reflect on the dynamics of gender privilege using a learning-by-doing approach grounded in empathy and critical thinking. Raising awareness about privilege dynamics is crucial for fostering a reconsideration of business activities from a social inclusion perspective, which holds significance for both current managers and the "managers of tomorrow" (i.e., the students). This article presents the rules, settings, and objectives of the game. Furthermore, it discusses the game's predicted outcomes considering relevant literature on privilege, the anticipated learning results and emerging dynamics during the game debriefing. Overall, the aim is to share this experiential learning opportunity and its related findings to encourage educational initiatives focused on sustainable business management and diversity management.

**12:20-12:45**

76104 | *Sexual and Reproductive Health Education to Attain Inclusive Education in Indonesia*

Alfiatul Khairiyah, Gadjah Mada University, Indonesia

Nefa Wahyuning Anggraini, Gadjah Mada University, Indonesia

Fitriatul Hasanah, Gadjah Mada University, Indonesia

Education about Sexual and Reproductive Health and Rights (SRHR) needs to be implemented in inclusive education to establish social justice. SRHR is everyone's right because it is tightly related to success of human empowerment. In Indonesia, the Ministry of Education and Culture has issued guidelines for Sexual and Reproductive Health and Right program to implement inclusive education. The legal basis for SRHR education has been regulated in Health Law Number 36 of 2009. However, the reality, SRHR education is not being implemented optimally in the inclusive education policy. The problems can be caught from the amount of sexual violence that occurs in formal schools, pregnancies outside of marriage, to the high amount of cases of early marriage among students. Sexual and Reproductive health knowledge is required for male and female students. This article aims to survey the extent to which inclusive education in Indonesia contributes to sexual and reproductive health issues based on the Salamanca education perspective and principles. The methodology used is a systematic literature review through UNESCO inclusive education guidelines, SRHR Education, and various cases of sexual violence among students in Indonesia. The results of the study indicate that the implementation of inclusive education in Indonesia is not optimized because it does not prioritize SRHR education as a major priority to prevent sexual violence and pregnancy outside of marriage among students. As a result, students are vulnerable to sexual violence cases because they do not understand the importance of sexual and reproductive health in their bodies.

**12:45-13:10**

74861 | *Intercultural Challenges of Western Exchange Students in Study Abroad in Japan: Voices of Western 'Other' and Identity Constructions*

Naomi Tsunematsu, Hiroshima University, Japan

This research investigated intercultural challenges and identity constructions of Western exchange students studying in Japan who have been marginalized in international students' research, using qualitative research method. Voices of Western students studying in Japan have been invisible in English publications, and their culturally specific challenges and their influence on their identity constructions in Japan have not been examined sufficiently. Further, Western students' study abroad experiences have not been sufficiently researched in Japanese publications. This research fills the gap by investigating the voices of exchange students from North America, Europe, and Oceania on their intercultural challenges specific to studying abroad in Japan, and their cultural and personal dilemma with their identity constructions. Students' narratives disclosed that students had strong aspiration to acquire Japanese language proficiency and learn Japanese culture through study abroad, and they wanted to connect their valuable experiences to their future career related to Japan. Students had concerns about their lack of Japanese communicative competence and cultural knowledge, which could result in impolite behavior. Japanese language is closely related to relationally defined selves based on social hierarchies in Japan, which could shatter Western students' assumption of their core identities. Students had cultural dilemma and internal conflict with the Japanese cultural influence on their identities and agency freedom. The research found that reflections on their intercultural experiences is critical, and educational support is needed to enhance students' understanding of culturally distant host culture. Guidance on how to cope with cultural dilemma can significantly influence students' future relationship with Japan.

13:50-15:30 | Room D

# Saturday Online Presentation Session 3

Profession Training

**Session Chair: Chengeto Chaderopa**

13:50-14:15

73902 | *Virtual vs Conventional Internship: Its Impact on University Students and Fresh Graduate's Employability Level*

Lavenda Geshica, Universitas Gadjah Mada, Indonesia

Ananda Zhafira, Universitas Indonesia, Indonesia

The COVID-19 pandemic impacted various aspects of people's life. In the educational aspect, the COVID-19 pandemic has changed learning methods from face-to-face to online via Zoom and other similar platforms. At the same time, there is a need for students and fresh graduates to develop skills to enter the workforce despite the pandemic challenges. This study aimed to explore students' employability in different internship programs. Through a quantitative approach, this research had two groups of participants who had joined virtual internships and conventional internship programs. The characteristics of virtual internship participants were university students or fresh graduates who had attended a virtual internship program at least once. Meanwhile, conventional internship participants were students who participated in a conventional internship program at least once in any company or other institution. Employability in this study consisted of four aspects: independent study, problem-solving, creativity, and communication. The situational Judgment Test (SJT) measurement was implemented to minimise social desirability. This study recruited 67 participants from two groups with virtual and conventional internships. Results showed no significant employability score difference between participants who joined virtual ( $M = 72.4$ ,  $SD = 8.32$ ) and conventional internship programs ( $M = 74.8$ ,  $SD = 4.33$ ),  $t(65) = -1.50$ ,  $p = 0.139$ . This result implied that virtual internship programs might be as effective as conventional ones in developing employability.

14:15-14:40

75337 | *Post COVID-19: Enhancing Learners' Project Management Skills Through Online and Face-to-Face Module*

Dina Adinda, Paris Nanterre University, France

Maria Denami, University of Upper Alsace, France

The COVID-19 pandemic has led to a surge in the use of online learning, including in the project management module (Shen et al., 2023). This course involves collaborative learning, where learners need to work productively together (Ruder et al., 2021). Despite the knowledge of successful practices of collaborative online learning (Biasutti, 2017; Khalil and Ebner, 2017), the official policy of the studied universities encourages all Departments to reduce the number of online trainings due to learners' feedback on emergency online courses during the pandemic. To suggest a practical insight into the above situation, this study focuses on answering the following questions: Face-to-face and online project management courses, which training modality helps learners develop their project management skills? and what are the aspects to be considered for organizing project management module so that it ensures learners' improvement in project management skills? The control group consisted of graduate students ( $n=10$ ) who attended a face-to-face project management module. Meanwhile, the experimental group was made up of final-year undergraduates ( $n=11$ ) who participated in an online project management module. Both groups completed a survey at the beginning and end of the module to evaluate their project management skills. The results showed that both groups had similar levels of project management skills at the beginning, but the experimental group showed significant improvement by the end. The study recommends that a well-planned instructional design can significantly enhance learners' skill development.

14:40-15:05

73727 | *Factors Affecting to Skill Training in Trimming Process*

Wisitsree Wiyaratn, King Mongkut's University of Technology Thonburi, Thailand

Anucha Watanapa, King Mongkut's University of Technology Thonburi, Thailand

Pichaya Chandit, King Mongkut's University of Technology Thonburi, Thailand

The research studies the factors that influence trimming skills in pineapple production, to increase productivity in operations. The results indicated that there was a problem with relatively low pineapple trimming skills among employees, as evidenced by the average productivity of 3-4 pieces per minute and a waste rate of 2.5%. The study was conducted over 5 months and involved a sample of 41 individuals. The research employed a combination of feedforward and feedback techniques along with peer-assisted learning. It revealed that certain demographic factors have an impact on productivity. Male employees exhibited higher productivity, with an average of 10.33 pieces trimmed per minute compared to female employees. Part-time employees also demonstrated greater productivity, averaging 9.29 pieces per minute compared to permanent employees. Regarding age, the range of 21-30 years was found to be most suitable for work, with an average productivity of 8.28 pieces per minute. Additionally, employees with work experience ranging from 1 to 5 years were the most effective, achieving average productivity of 8.27 pieces per minute. Furthermore, the training program utilizing the combination of pre-practice information provision and feedback techniques, along with peer-assisted learning, resulted in a significant improvement in pineapple trimming skills. The training led to a 39% increase in skill levels compared to the pre-training data collection. Moreover, the resulted in a 60% reduction in defects caused by the pineapple processing process. Overall, these findings provided valuable insights into the factors influencing pineapple trimming productivity and highlight the effectiveness of the training approach employed.

15:05-15:30

74165 | *Authentic Assessment Design for Academic Integrity in Tourism Studies: The Theory-Practice Nexus*

Chengeto Chaderopa, International College of Management, Australia

Nyemudzai Esther Ngocha-Chaderopa, Institute of Management, Australia

The rise in academic cheating in the education settings has had a detrimental effect on the overall quality of degrees and certificates conferred to graduates, while also tarnishing the reputation of the education sector. The advent of Artificial Intelligence (AI) has underscored the significance of authentic assessments especially because AI systems possess remarkable humanlike abilities to search extensive databases and generate academic reports and essays that often surpass the quality of work produced by teachers and students. The advent of AI has therefore seen a renewed focus on exploring the role of authentic assessment design in addressing the pervasive issue of academic integrity breaches. Relying on plagiarism detecting tools such as Turnitin, GPT-2 Output detector, and GPT-zero is not a sustainable strategy. Through an extensive literature review methodology, this study explores the viability of authentic assessments to promote academic integrity. Authentic assessments ask students to apply their knowledge and skills in real-world contexts, demonstrating their ability to think critically, solve complex problems, and showcase their understanding of the subject matter, fostering a culture of academic integrity. This study contributes to the current body of knowledge on authentic assessments and academic integrity by providing a practical example of an assignment in tourism studies that align with the principles of authenticity by mirroring real-life scenarios and tasks, encouraging students to demonstrate their competencies thereby promoting integrity in the learning process.

15:45-17:00 | Room D

# Saturday Online Presentation Session 4

Education & Inclusive Development

Session Chair: Cheng Hsu

15:45-16:10

73938 | *Contribution of Ergonomics in Designing Accessible Classroom for Deaf and Hard of Hearing Students in Indonesia: A Proposed Guideline*

Fiodesy Gemilang Putri, Independent Scholar, Indonesia

Made Sania Saraswati, Independent Scholar, Indonesia

For the past decade, several studies have been conducted in order to assess and confirm the impact of the physical classroom environment towards students' learning effectiveness, including deaf and hard of hearing (DHH) students. Several principles of ergonomics have been gathered aiming to provide guidelines in building a classroom that serves DHH students' needs. However, there is limited research on what needs to be considered when designing classrooms for DHH students in Indonesia. Looking at the fact that there are 2,270 special schools in Indonesia (Center for Data and Information Technology, Indonesian MoEC, 2020) with more than four classrooms used for DHH students in each school, a guideline which provides minimum requirement on designing classroom for DHH students is needed in order to ensure that the classroom would present positive impacts to the students' academic progress, not hindering the process of learning. This research aims to support academic progress of DHH high school students in Indonesia by providing inclusive classrooms using our proposed guideline synthesized from a systematic review of 12 academic papers. In the guideline, the first principle is to prioritize the comfort of the students, which is crucial for their psychological safety leading to engagement in class. The second principle is to enable them to function optimally as students. This proposed guideline places emphasis on resource availability, enabling teachers to implement it in accordance with the specific requirements of DHH students within the classroom setting.

16:10-16:35

75990 | *Impact of Gender and Inclusive Pedagogies on Teachers' Self-Efficacy, Student Attendance and Performance*

Ramesh Chhetri, Samtse College of Education, Bhutan

Tashi Tashi, Samtse College of Education, Bhutan

Kuenzang Gyeltshen, Samtse College of Education, Bhutan

Kezang Wangmo, Samtse College of Education, Bhutan

Sonam Wangmo, Samtse College of Education, Bhutan

Amidst the transformative changes taking place in Bhutan's political, economic, social, and educational landscape, efforts are underway to establish schools that are responsive to gender and inclusivity. However, there is a little empirical data that provides a realistic situation of gender and inclusivity in Bhutanese schools. Considering such situation, this study was designed to explore the Impact of Gender and Inclusive Pedagogies on Teachers' Self-efficacy, Student Attendance and Performance. Gender and Inclusive Pedagogical (GIP) approaches were considered as the central conceptual frame for teacher capacity building through this study. A 4-tiered Teacher Professional Development (TPD) package on GIP was designed and delivered to teachers. The impact of GIP intervention was assessed using both qualitative and quantitative data where an experimental research design was a major part. The mixed-methods research approach primarily employed survey questionnaires, Pre- and Post-assessment, lesson observation, school observation, and semi-structured interviews. The findings indicated a positive change in teachers' beliefs and perceptions regarding their competence in implementing inclusive practices. It suggests that interventions, training, and experiences between the baseline and midline measurements have had a beneficial impact on teachers' self-efficacy. Similarly, the performance of the overall student population was more consistent after the intervention and has shown improvement in both their attendance and their performance. The study, therefore, supports the need to provide professional development opportunities for teachers which include workshops, seminars, and training that focus on inclusive teaching strategies, differentiated instruction, and classroom management techniques for diverse learners.

16:35-17:00

75868 | *Establishing Norm Reference for SLI Children in Mainland China*

Cheng Hsu, Jiangsu Normal University, China

Li Jing, Jiangsu Normal University, China

This study aims to establish a norm reference of children's language development level. As many psychological-medical assessing tools are available for testing children's language development or impairment, treatments from medical institutions and professions are often involved. However, a testing instrument designed for early detection of SLI children for in-service teachers is needed. The Assessment of Language Impairments in School-age Children Scale developed by the National Taiwan Normal University was used in this study to establish a norm reference for children of school age in northern Jiangsu Province in Mainland China. Modification and justifications of items were made for better cultural-historical adaption of being used. All 113 participants were from an elementary school in Xuzhou City of Jiangsu Province. The results of each school age were calculated and compared with a norm reference established in Taiwan. The results showed that although the means don't have much difference, the cut-off scores of  $M-1.5 SD$  showed significant differences. The results also showed 6 out of 114 were diagnosed against the new norm reference, while five were diagnosed against NTNU's norm reference in Taiwan. However, the one who wasn't diagnosed against NTNU's norm reference in Taiwan scored 60, which was very close to the cut-off of 59.77. Thus, the diagnostic odds ratio in our study was between 4.42%-5.30%, which falls into the generally understood range of 5%-7%. Further study is needed for more participants from different regions for all school ages.

10:00-11:40 | Room E

# Saturday Online Presentation Session 1

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

Session Chair: Priscila Costa

10:00-10:25

74111 | *Shark Fin Rising! How To Create a Dynamically Inclusive and Welcoming School Community*

David Parrish, Charles J. Colgan, Jr. High School, United States

Colgan High School's FIN Friends relentlessly pursues a purpose of creating the most welcoming, inclusive school community possible. By facilitating interactions and relationships between special education and general education students and families through purposeful and intentional strategies, the FINS provide an opportunity for everyone to be accepted and involved. Come hear our story of building connections and culture and collaborate on ways to energize any school's community! The level of inclusion and welcoming, diversity and acceptance is the story of your school. Come swim with the Sharks if you dare!

10:25-10:50

75949 | *Construction of Instructional Design Model Using Picture Books on Children with Specific Language Impairment*

Li Jing, Jiangsu Normal University, China

Cheng Hsu, Jiangsu Normal University, China

Compared with ordinary children, children with specific language impairment (SLI) have delayed language development, poor reading comprehension, and greater difficulties in learning. This study tested 5 SLI children at a primary school in northern Jiangsu Province in China in the last two years. This study aimed to develop and implement an instructional design model for SLI English learners using picture books. The instructional model was developed through three stages. In the first stage, a literature review of the progress, challenges, and prospects of the Intervention of picture books on SLI children was conducted, and the results were integrated into the design of the instructional model. In the second stage, the results of the first stage, the instructional model, were evaluated and revised by expert review and interview. At the last stage, after the results of the previous stages were integrated, the final instructional model using picture books for SLI children's instructional design practice was developed. Using picture books, the instructional design model emphasizes SLI children's language learning motivation and understanding activities and systematically integrated experience-learn-apply-reflect-revise activities and language expression and interaction activities through all stages. The results showed positive language learning attitudes and gradual improvement in language understanding and expression through using instructional design model of picture books with SLI children.

10:50-11:15

74834 | *A Case Study: Psychological Trait Description of Adolescent Students Among Selected Progressive Schools in the Philippines*

Rishirl Cuario, National University, Philippines

Gregorio Samar, School Education, United States

In contrast to traditional learning, which solely generalizes for every student, progressive schools place both the individuals' talents and level of interest into context. Because the typical educational model only uses one side of the brain, it simply supports the notion that this is the one feature that has to be developed. The goal of this study is to demonstrate how chosen progressive schools' psychological outcomes during students' initiative and industry stages revealed themselves. It will concentrate on these two particular psychosocial stages because they are thought to have been formed by the study's intended participants, adolescent students. Since a case study's main objective is to comprehend the complexity of a case, which is similar to what is wanted for students in progressive schools, it was chosen as a qualitative research design. The Psychosocial Developmental Task Inventory by Dr. Richard Bryum under the initiative and industry phases, which is already a standardized inventory, served as the foundation for the researcher-made interview guide. The findings demonstrated that despite coming from various types of progressive schools, kids had developed their initiative and industry through the knowledge they had acquired in their learning environments and throughout the various facets of their school lives. They demonstrated their initiative in schoolwork by working quickly and effectively, in peer relationships by being approachable and sociable, and in problem resolution by accepting criticism in a constructive manner and acting to put things right. A leader is someone who unites their followers behind a common cause, promoting involvement.

11:15-11:40

74267 | *Left-Handed: Social Representations of Young People About an Invisible Difference*

Priscila Costa, PUC-SP, Brazil

The left-hander can be defined as the one who has preference for the left side of the body to perform activities. It represents around 10% of the population and is present in all schools around the world. However, often these students do not find the proper physical and attitudinal conditions for their full development. It is admitted that not all schools have adequate furniture and material to meet the left-handed student in the specificity. The aim of this research is to unsee the social representations of young people about the left-handed person and propose alternatives of educational practices for their inclusion. To this end, a comprehensive survey of research on left-handedness, social representations and social representations about inclusion was conducted. A field study was carried out proposing an experience with specific materials for left-handers (scissors, ruler, sharpener, pen, pencil, and crayon) followed by a conversation wheel and online questionnaire with a group of five young people from 15 to 20 years old in the community of Paraisópolis in São Paulo, four right-handed and one left-handed. The young people knew little about the subject and reported difficulty in using the materials and that this made them have empathy towards the left-handers by understanding them better. Participants reported understanding the importance of schools and families providing materials that make the school life of the left-handed student more favorable. It can be insured that deletion, invisibility, exclusion are complex concepts that permeate the issue of left-handedness.

11:55-13:35 | Room E

# Saturday Online Presentation Session 2

Higher Education

Session Chair: Abigail Jo Abainza

11:55-12:20

72835 | *Rethinking the HE Study Abroad Scholarship Programs in Saudi Arabia: Aligning Skills and Capabilities with Labour Market Priorities*

Annalisa Pavan, University of Padova, Italy

Saudi Arabia has by far the oldest tradition, among GCC countries, of fully government-sponsored scholarships for study at foreign universities dating back to the very early years of the modern Kingdom of Saudi Arabia in the 1920s. In recent years, in order to enhance the nation's overall competitiveness, scholarship programs are no longer the concern only of the Ministry of (Higher) Education. In what appears to be a major government shift, Saudi Arabia is introducing new internal and external scholarship programs sponsored by different actors, all dedicated to the goal of providing the best opportunities for Saudi citizens to acquire hard and soft skills, improve their employability, and help the country to achieve economic diversification. Besides workforce readiness, technical skills and entrepreneurship, soft skills also play a central role as essential human skills, and there is a growing emphasis on the ability to apply acquired soft skills in multicultural contexts. Accordingly, the new Saudi scholarship programs need to find the difficult balance between the acquisition of soft skills and hard skills, equally important in educating the youth to live and work in a global context and become innovators. This study explores how Saudi Arabia is building a HE multi-option education and training model: education and training in local HE institutions, involving a range of on-campus and online degrees; scholarship programs to study abroad at leading institutions; foreign university campuses on home soil.

12:20-12:45

74357 | *Home and Away: The Lived Experiences of UK-Based Algerian Doctoral Graduates on Returning Home to Algeria*

Amina Manal Zidi, University of the West of Scotland, United Kingdom

The launch of an international postgraduate scholarship programme, initiated by the Algerian government, commenced in 2014. Initially, five hundred Master students from different English language departments were offered scholarships to pursue doctoral studies in various UK universities with the aim of expanding their academic, social, and cultural knowledge. In return for the award of the scholarship, students were contracted to complete their intended degree and return home after their studies in the UK to start teaching in the Algerian university sector. This paper focuses on Algerians who have successfully obtained their doctorate and returned home to start their new academic careers. It sheds light on their lived experiences, as Algerian doctoral returnees, both on social and academic levels in order to understand how they make sense of their lived experiences and careers. The data featured in this project is taken from 18 online semi-structured interviews (3 pilot and 15 full interviews). The participants included 5 men and 13 women from different graduating UK universities, research fields, departments, Algerian cities, and working locations. Analysis of the data has been undertaken via interpretative phenomenological analysis (IPA) and this reveals the emergence of personal and group experiential themes. The main themes discussed in this paper include - criticality, professionalism, academic growth, academic network, research knowledge and skills, lack of resources, and bureaucracy issues. This paper contributes to a growing body of research literature related to the understanding of lived experiences of returning scholars from abroad and their experiences and the 'management' of returning.

12:45-13:10

74774 | *Bicol University Strategic Framework for International Speaking Engagements*

Abigail Jo Abainza, Bicol University, Philippines

This Strategic Framework for International Speaking Engagements for Bicol University was proposed based on the significant experiences of ten selected Bicol University personnel who have had opportunities to speak at international events from 2017 to 2021. The selected personnel and students were identified based on the records available at the International Relations Office and on a set of qualifications. A purely qualitative method of research was utilized. Through an interview guide, data from the international speakers were obtained in the design of descriptive narratives in which varied recurring themes were extracted to identify the key areas of the framework. The study concludes that the experiences of the key informants were varied. They were interviewed separately, and the experiences happened at different points in time, yet they shared common experiences, as evidenced by the recurring themes derived from their narratives. This goes to show that there is a universality of experience as far as international speaking engagement is concerned; The analysis of the issues and challenges experienced by the key informants showed the need to improve the existing system of the University in assisting the students and personnel in terms of their international engagements. Based on the experiences and the issues and challenges faced by the key informants, a strategic framework was crafted which can encourage students, faculty, and non-teaching personnel to engage in international speaking engagements. The framework will also improve the existing system of the International Relations Office.

13:10-13:35

76030 | *Lifelong Learning and Global View: The Window of 21st-Century*

Lini Musammat Sultana Lais, Eotvos Lorand University, Hungary

The brief presentation is titled "Lifelong Learning and Global View: The Window of the 21st Century." The power of education can drive a nation, and as a comprehensive strategy, education intentionally prepares understudies to be dynamic and engaged with an interconnected world, as well as develop the connection between culture and language (IBO, 2012). Sir Thomas Percy Nunn argued that education aims to plan one's identity, prepare one for a boundless life, and mold a rational mind into a sound body (Yamasaki & Foskett, 2009, p. 2). Lifelong learning, which increases innovation capacity, competition efficiency, and system-level operation (Kalman, 2018), has an integral link to higher education (Yang et al., 2015). Over the past few years, Lifelong Learning has become synonymous with innovation in data and exchange. Still, progress has been slow due to both existing and undiscovered challenges in the education arena, as well as other co-related factors. Therefore, the purpose of this presentation is to demonstrate the significance of lifelong learning. At the very outset, the presenter will try to focus on the basic philosophies of education (in the light of Hofstede's six-dimensional theory), followed by higher education in connection with lifelong learning. As well, this presentation will focus exclusively on lifelong learning barriers in global learning and training activities. The presenter will also suggest some remedial measures for improving this situation for the overall development of Lifelong Learning, which may be able to provide some new insights/information on the policy framework that supports Lifelong Learning, which is a window into the 21st century.

13:50-15:05 | Room E

# Saturday Online Presentation Session 3

Challenging & Preserving: Culture, Inter/multiculturalism & Language

Session Chair: Teresa Abainza

13:50-14:15

75899 | *Integration's Learning Outcome Through Game-Based Learning and Cultural Practices among Learners: Edutainment Platform*  
Pua Shiau Chen, New Era University College, Malaysia

The integration of Game-based learning (GBL) with cultural learning is feasible and advantageous. GBL facilitates the comprehension of cultural education embedded within the gaming context. Numerous contemporary pedagogical and instructional approaches have transcended the conventional confines of classroom-based learning, extending their purview to encompass the integration of technology-enhanced educational paradigms. Among these approaches, GBL stands out as an unequivocal exemplar, seamlessly amalgamating technological tools into its framework. This pedagogical modality possesses the inherent capacity to invigorate learners' motivation to acquire knowledge while concurrently fostering moments of intellectual revelation. The edutainment platform offers opportunities for GBL and cultural practice. "The Confucius Roll Call" game is an exemplar of the games found within such edutainment platforms. A narrative dataset obtained through the observational method and open ended interview questions will be analyzed, focusing on the participation of 8 learners engaged in the study of Confucius' culture using the "Confucius Roll Call" game. The 8 learners were aged between 20 and 23. They were participants in cultural leisure class. This analysis aims to uncover insights into the positive and negative learning outcomes achieved through the integration of GBL and cultural practices within the context of Confucius' culture education. This research has the potential to offer educators and learners valuable insights into enhancing the effectiveness of learning and education through the integration of Game-Based Learning and cultural practices.

14:15-14:40

70282 | *Teaching Verb 'Be' to Arab English Learners: Challenges and Solutions*  
Jumana Al-Amir, Box Hill College Kuwait, Kuwait

The verb 'be' has always been a challenge for English learners of Arabic background. The linguistic equivalent of the verb 'be', the copular 'kaana', is usually omitted in the present simple form. As a result of first language interference, learners tend to omit verb 'be' in the present simple form. It is particularly more challenging for beginner language learners as they are more likely to think about the utterance in their first language and translate it in their heads following their mother tongue's structure. For that reason, beginner learners produce sentences such as 'He teacher' 'I happy'. Addressing the problem requires contrastive linguistic awareness of the matter on the teacher's part. Conjugating verb 'be' poses another challenge for learners. The different forms of the verb makes it confusing for learners that they need to be reminded that it is still the same verb. This session explores the difficulties imposed by verb 'be' for beginner English learners of Arabic background particularly. To pinpoint the problem and find solutions it is important to identify the root cause of the problem using error analysis techniques. The session then sheds light on the different methods used in presenting and teaching sentences with verb 'be' in the present simple form to aid learners in producing grammatically correct sentences. Attendees will be provided with practical activities to use in teaching verb 'be' to struggling learners.

14:40-15:05

75733 | *Community-Based Language Development of Bikol Miraya*  
Teresa Abainza, Bicol University, Philippines

The study generally aimed to establish the language status of Bikol Miraya with the Sustainable Use Model (SUM) as its methodology and the conditions which provided a framework for evaluating the sustainability of the Bikol dialect used in Daraga, Camalig, Guinobatan, and Jovellar. Specifically, it identified the factors that determine the level of language use based on the Functions, Acquisition, Motivation, Environment, and Differentiation (FAMED) conditions and measured the level of language use and the vitality of the language using the Expanded Graded Intergenerational Disruption Scale (EGIDS). Moreover, by getting the agreement of the speech community, it developed plans of action to reinforce conditions that likely result in a sustainable level of language use. Using purposive sampling, the key informants who are native speakers of the language were selected from the four municipalities. Data collected mainly from focus group discussions show that the EGIDS level for Bikol Miraya is threatened, which means that some community members use the language face to face for functions of day-to-day life, but an increasing number no longer do. In its current state, Bikol Miraya is used for face-to-face communication by all generations and is sustainable regarding its Functions, Acquisition, Environment, and Differentiation Conditions. However, people are losing faith in its potential, especially amid the fast-changing landscape of education and technology. Its 300,000 speakers in 2009 (SIL,2020) might drastically drop if measures are not taken to strengthen its vitality.

15:45-17:00 | Room E

# Saturday Online Presentation Session 4

Educational Policy, Leadership, Management & Administration

Session Chair: TBA

15:45-16:10

73762 | *Emasculated Freedom? Quantified Academic Governance in the UK*

Miaomiao Jia, University of Cardiff, United Kingdom

As Foucault (1982) observes, the power of the neoliberal system lies in the fact that no central authority pre-determines the collection and dissemination of knowledge in any prescribed way, but a certain state of subordination of individuals to the government empowers it. In the 1980s, the neoliberal ideology reached all sectors of society in the UK, including education (Mula-Falcón et al., 2021). It was characterised by principles such as the privatisation of public services and the free-market economy, which drove higher education institutions to aim to respond to market demand by scaling up knowledge production (Marginson, 2018). A range of neoliberal policies have been enacted, such as private management of the public sector and quality assessment systems that quantify academia (Ball, 2003). Morley (2004) argues that dissecting things requires situating them in broad power relations to decode transactional meanings and thus deconstruct the oppressed group's subjection to dominant discourses. I will critically explore the way in which neoliberal managerialism has constructed a quantified UK research culture through competition, performance and audit, resetting the reputation, status and resources of academic communities. This academic capitalisation has created divisions and anxieties in the UK academic community, breeding an emasculated academic freedom. Thereby arguing that neoliberal managerialism with its economic rationality, competitive core and market mechanisms sacked traditional academic values and instituted a neoliberal research culture.

16:10-16:35

75126 | *The Effects of Contextual Leadership on Teacher Professional Learning, Self-Efficacy, and Commitment: Mediating Roles of Teachers' Agency*

Zhihao Huang, Wenzhou-Kean University, China

Mohammad Noman, Wenzhou-Kean University, China

The purpose of this study is to examine the effect of contextual leadership (CL) on teacher professional learning (TPL), teacher commitment (TC), and teacher self-efficacy (TSE) in mainland China. The research specifically investigates the mediating role of teacher agency (TA) in impacting contextual leadership on TPL, TC, and TSE in education. The study is designed using a quantitative research method. In this study, a Chinese-translated questionnaire, available from current studies in the Chinese context, is utilized to measure the teachers' perceptions of these variables. The participants are collected through a snowballing approach, including 500 in-service teachers from kindergarten to secondary schools in Zhejiang province, China. Data analysis for this study will be conducted using the structural equation modeling (SEM) technique in AMOS 26. The findings of the study will contribute to the existing body of literature on contextual leadership and draw implications for current school principals, providing a better interpretation of contextual leadership in school practice.

16:35-17:00

75412 | *University Female Leaders and Imposter Syndrome: An Exploratory Case Study in Malaysia*

Nouran Tarek, University of Nottingham Malaysia, Malaysia

Rozilini Mary Fernandez-Chung, University of Nottingham Malaysia, Malaysia

Imposter Syndrome affects individuals, specifically high-achieving females, by experiencing self-doubt and feelings of being fraudulent. This qualitative study employed an innovative visual quasi-gamification tool to conduct semi-structured interviews aiming to investigate how Imposter Syndrome affects higher education female leaders in Malaysia and their management of it. The finding suggests that Imposter Syndrome manifests uniquely in the context of females leading higher education in Malaysia. Participants do not suffer from significant self-doubt notions or perceive themselves as fraudulent. However, they experience an immense need to appear ideal in the eyes of their colleagues and those who surround them, in addition to a need to perfect many work aspects. The research demonstrates that female leaders in this study manage Imposter Syndrome through individual self-awareness and reflection. This study also demonstrates the critical need to raise awareness and educate leaders, peers and students about imposter syndrome and its impact, particularly on female leadership in higher education.

10:00-11:40 | Room F

# Saturday Online Presentation Session 1

Foreign Languages Education & Applied Linguistics

Session Chair: Summer Wang

10:00-10:25

76111 | *Learning Language but Not Only Language – A Case Study on COIL in International Settings*

Shuguang Wang, University of North Carolina at Chapel Hill, United States

Yi Zhou, University of North Carolina at Chapel Hill, United States

The world is going increasingly globally, raising the need to facilitate communications between different cultural communities. Language education has its role in this process. While language education includes multiple perspectives, this paper focuses on the learning outcomes of a COIL (Collaborative Online International Learning) project conducted in international settings involving two Chinese and American universities. The researchers sent out surveys to 65 students after the COIL project to collect students' feedback and conducted critical content analysis. Results showed: 1) Students from both countries mentioned the increase in language skills, including the speaking and oral perspectives; 2) Students from both universities expressed a deeper understanding of cultures from the other side; 3) Students from both sides expressed their willingness to continue the project and the hope to build longer relationships with the other side; 4) Chinese students reported they had more confidence and courage to speak, while American students wrote about their awareness of the lack of communications in best practices. Some challenges identified by the students included: the issue of continuous and clear instructions from both sides and the influences of different time zones on the schedules of the meeting sessions. The researchers suggested: 1) A smoother communication channel would be helpful for conducting the COIL projects; 2) The COIL should be recognized for its significant effects on students' communication motivations and students' language skills; 3) Practitioners and researchers should create opportunities for building longer-term relationships for students after the COIL project.

10:25-10:50

76083 | *Transformative Effect of Reading Activities on Critical Incident Scenarios in Fostering Cultural Empathy*

Minami Hyodo, Emory University, United States

In response to the evolving political and social landscape of the 21st century, foreign language (FL) programs within US colleges have undergone a significant paradigm shift. The focus has transitioned from proficiency across skills to "transformation". A key avenue through which this transformation can be achieved lies in FL classrooms, where the cultivation of "cultural empathy" is being pursued. However, this integration of language studies and cultural content, designed to stimulate self-reflection, critical analysis, and emotional engagement, presents notable challenges, particularly at introductory levels and in the context of Japanese as a Foreign Language (JFL) environment, due to learners' limited linguistic abilities, educators' hesitancy to use L1, and the lack of target-culture communities. To address this, the teacher-researcher conducted a project in an Elementary Japanese course: exploring students' transformation towards increased cultural empathy through a two-step exercise involving reading scenarios in Japanese and subsequently composing reflections and discussions in English. The reading materials, aligned with the textbook content (family dynamics, dining etiquette, gender roles, and punctuality), explored value conflicts between Japanese people and individuals from different cultures. Qualitative thematic analysis of student reflections using MAXQDA (2022) revealed discernible patterns and outcomes. Notably, perspective transformation surfaced, especially in the context of punctuality. While the activity might not wholly transform students, it serves as a gateway to cultivating fundamental cultural empathy skills. Despite the limitations of this case study, it indicates that scenario reading and discussion could effectively foster both FL skills and cultural empathy without the risk of real-world consequences.

10:50-11:15

76073 | *An Investigation of Translanguaging as Language Policy in Chinese Higher Education*

Summer Wang, University of Edinburgh, United Kingdom

Andrew Yu, University of Edinburgh, United Kingdom

In recent years, translanguaging has begun to gain momentum in English language classrooms in China to challenge the traditionally dominant monolingual approach. Previous studies acknowledged the great pedagogical potential of translanguaging in language learning (e.g., Mazak et al., 2017; Cenoz & Santos, 2020). However, influenced by the monolingual ideology, teachers' attitudes towards translanguaging remain ambiguous. To this end, this qualitative study aims to recognise the role of translanguaging as policy with Bonacina-Pugh's (2012) tripartite model of language policy as "text", "discourse", and "practice" by analysing related documents and interviewing four in-service teachers. Specifically, the research addresses three research questions: 1) the governmental and scholastic plan or policy of the use of language(s) in classrooms; 2) teachers' beliefs and ideologies on translanguaging; and 3) classroom practices of translanguaging. The study suggests that there is no explicit language policy for classroom practices at "text" level, giving teachers and students autonomy for language practices; English-only policy is highly evaluated, yet a translanguaging space is allowed in the classroom for students to better express themselves at "discourse" level; and translanguaging is employed for different purposes but mainly to facilitate students' comprehension and to strengthen communication at "practice" level. Translanguaging as pedagogy can be employed in future language education because of its affordances. Moreover, it highlights the pivotal role translanguaging played in raising teachers' awareness of challenging the view of English-only being the best practice and helping language learning more effectively.

11:15-11:40

75080 | *Identifying and Addressing Mispronunciation Among College Students*

Chandra Mohan Vasudeva Panicker, Lincoln University College, Malaysia

Mispronunciation is a common problem among second language learners due to both suprasegmental and segmental features. This paper explores college students' mispronunciation and seeks ways to overcome this problem in the shortest time possible. A common reading text was used as a platform to accommodate this study. The respondents for this study consist of eight college students who are currently pursuing their diploma in a local university. This study employed two common tools to collect data; pronunciation drills, and tongue twisters. The data were analysed using both qualitative and quantitative methods. The analysis of the data revealed that the suprasegmental features were more dominant than segmental features in their mispronunciation and the short treatments had help in correcting the students' mispronunciation effectively.

11:55-13:35 | Room F

# Saturday Online Presentation Session 2

Foreign Languages Education: Teaching, Assessment, and Development

Session Chair: Jocelyn Perida-Castro

11:55-12:20

73933 | *Digital Technology Adoption in Legal Translation Education: A Systematic Literature Review*

Ann Margareth, State University of Jakarta, Indonesia

Moch. Sukardjo, State University of Jakarta, Indonesia

Zulfiati Syahrial, State University of Jakarta, Indonesia

Legal translation continues to play a critical role in the modern world. There is a high demand for legal translators in recent years especially in developing countries like Indonesia. This study aims to understand how digital technology such as machine learning is being adopted and integrated into legal translation education. In particular, this study attempts to shed light on the use of such technology in education to produce the translation document that is equivalence of its legal intent. This study also explores the expected challenges facing the implementation of digital technology in the legal translation classroom. The analysis work is conducted based on the data obtained through the literature searching method known as Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA). The selected articles are collected from Scopus and Sinta database. The data synthesis of 71 articles is conducted with the support of NVivo software. Expert review was then conducted before summarizing the findings. The results reveal that the adoption of the new digital technology in legal translation education is still at its infancy. It is found that the use of the machine learning tool in legal translation education is still lacking despite many believe of its usefulness and effectiveness. It is also found that the machine learning adoption can be achieved when all legal translator professionals agree to share their corpus. The collaborative work to build the corpus inside the machine learning tool is urgently required to achieve the high quality of the legal translation results.

12:20-12:45

74937 | *Empowering Learning: Exploring the Use of ChatGPT to Provide Feedback on Students' Written Assignments in Higher Education*

Aaisha Al Balushi, University of Technology and Applied Sciences, Oman

As technology becomes increasingly prevalent in education, the question of whether teachers should use ChatGPT, an AI-powered language model, to provide feedback for students' written assignments in higher education institutions is gaining prominence. This study examines the potential benefits and drawbacks of integrating ChatGPT as a feedback tool in higher education settings. Through a mixed-methods approach, we conducted a comparative analysis of students' essay scores and perceptions of feedback from both human instructors and ChatGPT. Additionally, interviews with faculty members explored their views on the implications of AI-based feedback in the learning process. Preliminary results suggest that ChatGPT feedback offers instant availability, allowing students to revise their work promptly. However, some students express reservations about the depth and context of ChatGPT's feedback, preferring the nuanced approach of human instructors. Faculty members express concerns about AI-driven feedback potentially hindering personalized guidance and rapport between instructors and students. The study provides insight into the effectiveness and acceptability of ChatGPT as a supplementary feedback tool, identifying scenarios where it can complement traditional instructional methods and areas where human expertise remains indispensable. Our findings contribute to the ongoing dialogue on the role of AI in higher education, offering valuable implications for educators seeking to strike a balance between technological innovations and the preservation of human interaction and pedagogical expertise.

12:45-13:10

76085 | *The Integration of Error Correction Codes in Five Introductory Writing Classes*

Ann-Marie Simmonds, Rabdan Academy, United Arab Emirates

Effective teacher feedback on second language writing cannot begin and end with surface error correction. However, many students equate 'good' writing with error free writing and see any attempt on their part to fix their errors as a way, and at times the only way, to improve their writing. Hence, instructors and students often hold contrasting opinions about 'improvement' in the context of the second language writing classroom. This presentation focuses on students' use of error correction feedback across five sections of an introductory writing class taught in Spring 2023. I highlight the corrections made by students as well as those ignored or overlooked based on the error correction sheet that was provided and discussed. While some students revised and edited their writing by incorporating both error correction and narrative feedback, others focused solely on amending those errors related to form and not content. What constitutes improvement in writing therefore remains a topic of discussion. The findings – in the form of final assessment grades – show that even for students who only attempt to 'fix all their mistakes', there was a retention of some of these concepts, evidenced on the writing portion of the final exam. One tentative conclusion is that this is due to students' semester long practice of self-correction in addition to revision. Secondly, by having students complete a portion of their writing assignments in class, they are able to more actively process language structures and internalize linguistic patterns (Swain, 1985).

13:10-13:35

75959 | *Understanding Writers' Intention: Personal and Impersonal Metadiscourse on Online Conference Abstracts*

Jocelyn Perida-Castro, De La Salle-College of Saint Benilde, Philippines

Aside from journal publications, research conference is another avenue for scholars to share their research findings with the academic community. During the Covid-19 pandemic, many annual, bi-annual, and quarterly research migrated to fully online presentations. In light of this migration to a fully online conference modality from 2020-2022, this study examined the rhetorical moves present on conference research abstracts from four disciplines: Language and Literature, Business and Economics, Science and Technology, and Education. The data were sourced from the online published Conference Book of Abstracts which were manually color-coded by the researcher with the aid of two additional intercoders to identify the communicative function of the conference abstract using Hyland's (2000) five-move model: (1) introduction (2) purpose (3) method (4) result or product and (5) conclusion. Moreover, the data were also run to AntConc Software to see the common transitional devices plus the personal and impersonal moves used (Hyland, 2005). The result yielded that the most common interactive expressions were mostly transitional, evidentials, and frame markers but there were no endophoric and code glosses. This study significantly grounds how research abstracts as a summary of the whole paper entice readers and or conference attendees.

13:50-15:05 | Room F

# Saturday Online Presentation Session 3

Foreign Languages Education & Applied Linguistics

Session Chair: Mauytova Zhannur

13:50-14:15

72655 | *Enhancing Academic Writing Vocabulary Use through Direct Corpus Consultation: Saudi English Majors' Perceptions and Experiences*

Raniya Alsehibany, Riyadh Female College of Applied Technology, Saudi Arabia  
Safaa Abdelhalim, Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia

Using corpora as a learning tool in Second Language writing has gained popularity recently. The present study aimed to explore how Saudi EFL students perceive and engage with direct corpus consultation activities in academic writing as an effective method of overcoming their vocabulary errors. Hopefully, this study will provide insights into the issue of raising awareness among both EFL university students and writing teachers about the benefits of direct corpus consultation in academic writing, as well as highlighting the potential challenges students might face. Two specific questions were addressed in the study: How do Saudi EFL students perceive direct corpus consultation as a method for overcoming vocabulary errors in academic writing? What are the challenges that EFL students encounter when they use direct corpus consultation? Based on convenience sampling, a total of 32 Saudi female students majoring in English participated in the study. The study employed a mixed-method approach to increase the credibility of the study results. The study data were collected from a structured questionnaire based on a 6-point Likert scale and semi-structured interviews. The corpus used was the Corpus of Contemporary American English. The findings of both the quantitative and qualitative analysis revealed that the participants were positive about using direct corpus consultation to improve vocabulary and academic writing. In addition, some challenges associated with using direct corpus consultation were outlined in the study findings. The study concluded with several recommendations for future research and pedagogical implications.

14:15-14:40

74427 | *Exploring Teachers' Beliefs and Practices of Formative Writing Assessment: A Case Study of a Novice Secondary Teacher in Mainland China*

Xiaohan Liu, University of Exeter, United Kingdom

Formative writing assessment has gained increased attention in research, but there is limited knowledge about how it is implemented in actual classroom settings, especially in English as a foreign language (EFL) contexts at the secondary school level. For many EFL students, the classroom is their primary platform for developing their second language (L2) writing skills, and teachers play an essential role in promoting their learning outcomes. By exploring teachers' beliefs and practices of formative writing assessment, we can enhance our understanding of current practices and provide pedagogical implications for the development of teacher education. This case study focused on how a novice transborder teacher applied her learning in an English as a second language (ESL) context to design and implement formative writing assessment in an authentic EFL context. Based on interviews, voice memos, documents, and feedback samples from the teacher, this study suggested that the teacher provided students with ample opportunities to practice writing and offered appropriate scaffolding along the way. The results also showed that the teacher attempted to combine written corrective feedback (WCF) with feedback initiated by the students. However, WCF continued to be the primary source of feedback due to the students' limited English proficiency. Finally, the findings revealed that teacher education might not place sufficient emphasis on L2 writing pedagogy and assessment literacy. The research results provide implications for teacher education and future research.

14:40-15:05

75576 | *The Effectiveness of Critical Reading Strategies in Comprehension of Expository Texts*

Altyn Kelimberdiyeva, Nazarbayev Intellectual School of Chemistry and Biology in Aktau, Kazakhstan  
Khuriya Paviz, Nazarbayev Intellectual School of Chemistry and Biology in Aktau, Kazakhstan  
Nurzada Yermaganbetova, Nazarbayev Intellectual School of Chemistry and Biology in Aktau, Kazakhstan  
Mauytova Zhannur, Nazarbayev Intellectual School of Chemistry and Biology in Aktau, Kazakhstan

The aim of this research is to find out the impact of some critical reading strategies on upper- intermediate students' comprehension of expository texts. Action Research with a mixed method approach was used as a design of this study. For quantitative analysis, a pre-test, post-test of critical reading. Four texts on science and industry and four texts on nature and environment were deployed during the study. Researchers conducted semi-structured interviews for qualitative analysis to study the students' perception according to the practiced strategies. As for findings, after 10 weeks' of intervention, high-level readers completed 85-89% of the task correctly as opposed to their results before the study when they could only complete only up to 60 % of the task. Those are just 3 students out of all 11 students. Students improved their skills in deducing the meaning of the words, summarizing extended texts, making connections with real life and identifying the authors' tone and purpose. The students, who gained lower scores in the pretest, had a noticeable improvement covering more than half of the task, especially in deducing the implied meaning, the tone of author and summarizing of the text. In interviews, students highlighted the importance of summary writing. Despite finding it tedious in earlier lessons, they claimed that at the end, it had helped them organize their thoughts and determine the necessary supporting facts. They concentrated on key terms and phrases of the prescribed document that are important to remember and provided a clearer explanation.

15:45-17:25 | Room F

# Saturday Online Presentation Session 4

Counselling, Guidance & Adjustment in Education

Session Chair: Ching Ting Tany Kwee

15:45-16:10

75499 | *Career-Related Parental Behaviour and Senior Secondary Students' Career Development in Underdeveloped China*  
Yang Yixing, The Education University of Hong Kong, Hong Kong  
Siu Wai Wu, The Education University of Hong Kong, Hong Kong

Parents are major socializers for senior secondary students' career development. Prior research has investigated parental influence and highlighted typical types of parental support. While parental support highly interplays with other career-related behaviour, there is limited research exploring the career-related parental behaviour (support, intervention, engagement) on senior secondary students' career adaptability, especially in underdeveloped areas of China. Therefore, this study investigated the impact of career-related parental behaviour on career adaptability among senior secondary students in underdeveloped regions of China. Drawing on a sample of 838 senior secondary students in Meizhou, Guangdong Province (Mage=17.51, SD=0.89, 50.7% Female), this study adopted a person-centred approach to evaluate career-related parental behaviour and their corresponding influence on students' career adaptability. Results recognized two types of parents ("authoritative" and "warm and supportive") regarding their career-related behaviour. Senior secondary students in the "warm and supportive" group show higher career adaptability than those in the "authoritative" group, specifically in control, curiosity, and confidence. However, no difference in concern is found between the two groups. These results emphasize the value of the person-centred approach in understanding parents concerning their career-related behaviour in underdeveloped China. Furthermore, it suggests that although filial piety is valued in Chinese culture, parents need to let their children go. It will benefit senior secondary students more through active support and engagement in career development. With a new understanding of parents and their impact on senior secondary students' career adaptability in underdeveloped China, this study lays a foundation for future research and practical interventions.

16:10-16:35

75700 | *Reflection on my Interactions with Student J in a Rural Primary School in China Within the Framework of Motivational Interviewing*  
Jiayi Song, Longqiong Primary School, China

Current pedagogies for supporting academically struggling students mainly include tailoring learning contents to meet their differentiated needs or offering one-on-one interventions to improve their self-management. However, using counseling approach to elicit behavioral change has not been explored much. This case study analyzes my three conversations with an academically struggling student in a rural primary school English class in southwest China within the framework of Motivational Interviewing (MI). The goal is to evoke a behavioral change in the student and help him become more engaged in class. I had been teaching this student named J since Fall 2021. His initial disturbing behaviors (e.g., making noises, sprinkling ink over his desk) in class revealed that he might lack the confidence in learning English, so our interactions focused on making him realize his capacity of learning well and obtaining a sense of achievement through continuous effort. Through MI-embedded conversations, J became less disruptive and more engaged in class. He also became more accepted by his peers and perceived himself more positively. I applied MI strategies of Open-ended Questions, Affirmations, Reflective Listening and Summaries in interacting with J. After each conversation, I reflected on the stages of change that J went through, including his ambivalence and change/sustain talk. Finally, I evaluated my interaction with J centering around MI spirits: partnership, evocation, acceptance and compassion. I concluded about the three factors in cultivating a trustful partnership with an academically struggling student: acceptance, sustained attention and forward-looking approach (shift focus from past frustration to future possibilities).

16:35-17:00

75619 | *When Counseling and Education Intertwine: Using Spelling Lessons as a Motivational Tool During Counseling in Detention Center – A Case Study*  
Suchakrey Koomplee, Department of Juvenile Observation and Protection, Thailand  
Somnuck Uansri, Department of Juvenile Observation and Protection, Thailand

Purpose: In this study, we investigated to what extent education could be applied as a motivational tool along with individual counseling. We incorporated spelling lessons during counseling sessions and observed its association to the youth's behavioral change. Method: Our subject was an illiterate youth with aggressive behaviors. He received two 45-minute counseling sessions. We then customized a one-on-one curriculum on basic spelling. He attended 2-hour sessions thrice weekly. His improvement was measured through staff reports on peer interactions and his behavior. Results: Initial assessments showed that his behavioral problems rooted from being constantly taunted for his illiteracy, resulting in his low self-esteem. We designed a spelling curriculum to instruct basic writing, while affirming his progressing performance (without evaluation). We demonstrated the benefits of this curriculum by asking him to read words off the wall. After the first week, he became an enthusiastic learner, and started to understand words around the facility he couldn't comprehend before. During the two months of this curriculum, staff reported improvements in his interactions with peers; he showed greater pride in his literacy progress, and better relationships with friends through homework assistance. Staff reports on his aggressive behaviors and quarrels declined by 75% (from twice a week to monthly on average). After counseling sessions terminated, staff reported that his aggressive behaviors relapsed to generally once a week. Conclusion: Psychological counseling and education could be used alongside each other to counter complex learning obstacles. Establishing a more sustainable curriculum with long-term influence should be further investigated.

17:00-17:25

75906 | *Navigating Career Pathways: The Impact of Mentorship Programs on Ethnic Minority Female Teachers in Australia*  
Ching Ting Tany Kwee, The University of New South Wales, Australia

Ethnic minority female teachers face challenges related to linguistic and cultural discrimination, as well as gender-based stigmas. Despite these obstacles, little research explores the role of mentorship in their career development. This study aims to design an effective mentorship program to help these teachers overcome career barriers and attain their goals. Guided by two research questions—1) What stigmas hinder their career progression? and 2) How can mentorship mitigate these challenges?—the study involves 20 ethnic minority female teachers in Australia. The theoretical framework is grounded in Social Cognitive Career Theory (SCCT) and utilizes Interpretative Phenomenological Analysis (IPA) to examine shifts in perceptions and mental representations. Data are gathered via semi-structured interviews and focus groups. Findings suggest that mentorship fosters resilience, aids in career resource identification, and nurtures leadership roles. Moreover, it enhances collaboration among schools, communities, and ethnic minority teachers, thereby reducing prejudices and stereotypes. This study offers valuable insights for tailoring mentorship programs to the needs of ethnic minority female teachers, thereby diversifying the teaching workforce for the benefit of students.

10:00-11:40 | Room G

# Saturday Online Presentation Session 1

Teaching Experiences, Pedagogy, Practice & Praxis

Session Chair: Susie Kung

10:00-10:25

75922 | *The Impact of Using Adult Learning Theory Principles in Design and Implementation of Professional Learning Experience at a Higher Education Institution*

Aminath Zifna, The Maldives National University, Maldives

Incorporation of adult learning principles allows the trainers to create effective and engaging professional learning experiences that align with the unique characteristics of adult learners, leading to better obtain of learning outcomes and retention of knowledge. This qualitative paper emphasis is on the impact on the learners of the use of adult learning principles. Purposive sampling was used to select 10 participants who had enrolled in at least two professional learning experiences in the recent 18 months. Open ended questionnaire and focus group interview was used to gather the data. The findings revealed that participants (1) when the design of the professional learning experience includes connecting to real life situation and addressing the real-life challenges, it allows the participants to be more actively engaged with the learning content and activities and to encourages critical thinking and application of knowledge in practical situations, (2) when self-guided instructions are given it provides opportunities for the participants to set their own learning goals and take control of their learning journey (3) when participants are provided with immediate feedback, it allows participants to acknowledge their strengths and areas to be improved (4) when the implementation of the professional learning experience creates a space for the participants to share their ideas, concerns and challenges it had lead a boost of motivation to share and learn and build from each other.

10:25-10:50

74424 | *Supporting Student Process of Writing a Preproposal for Final Graduation Projects: An Action Research Study*

Melania Piedra-Barrera, University of Costa Rica, Costa Rica

This action research study aimed to support students writing process in the development of preproposals for Final Graduation Projects, a key requirement for the University Teaching degree at a major university in Costa Rica. The process involved students delimiting a research problem, conducting an initial literature review, and proposing a methodological approach. However, students struggled with converting their ideas into written form, resulting in a solitary and challenging process. To address this issue, three strategies were implemented: mandatory individual consultations with the professor, group conversations, and in-class writing groups. The mandatory individual consultations provided personalized guidance and feedback, helping students clarify their ideas, structure their proposals, and receive expert advice. Group conversations facilitated peer interaction, collaborative learning, and collective brainstorming of research problems and methodological approaches. In-class writing groups aimed to be a space for students for accountability by focusing on small tasks to be accomplished during the writing session. The results, obtained through a Likert scale and open-ended questions, indicated that the majority of students found the strategies beneficial in terms of clarifying their ideas and receiving feedback from both the professor and peers. However, students did mention that the limited amount of time dedicated to these activities was a disadvantage. By incorporating these strategies, educators can empower and support students in effectively translating their ideas into well-structured, scholarly proposals. This approach not only improves research and writing skills but also facilitates the successful completion of Final Graduation Projects, thus enabling students to achieve their academic goals.

10:50-11:15

75373 | *Teacher Burnout and Its Influence on Teacher Turnover*

Khuriya Paviz, Nazarbayev Intellectual School of Chemistry and Biology in Aktau, Kazakhstan

The aim of my study is to find out Kazakhstani teachers' burnout causes, explore its impact on teachers' turnover intentions and study teacher burnout prevention measures for improvement of teacher retention. A case study design with a mixed method approach was used to understand the issue in depth. The autonomous school in the western area of Kazakhstan was chosen. A Questionnaire and semi-structured interview were used and developed in three languages as the researcher aimed for each interviewee to feel comfortable. "Teacher Burnout Measure" was (Richmond, Wrench and Gorham, 2001, p.211) employed to find out the burnout level of surveyed teachers. Teachers were selected for the interview based on the numbers of "agree" in the "teacher burnout measure". Teachers were considered as having signs of burnout in the case when they have at least five "strongly agree" or "agree". For the interview analysis "constant comparative method" was used. "Respondent validation" effort was also made (Bush,2002) to ensure accuracy of interview notes. The findings of the survey reveal that the main causes of teacher burnout are overload and increased paperwork. Although many teachers in this study have demonstrated turnover intentions in the near future, the numbers of teachers with signs of burnout are few. Data obtained from interviews demonstrate that teachers attribute the problems connected with overload to school administration's poor management skills. From the perspectives of surveyed teachers, decreased paperwork, more professional development opportunities and appreciation of work more frequently could impact their decision to remain positively.

11:15-11:40

76070 | *Braving the Winds of Change: Self-Study as a Valid Change Agent in Teacher Education*

Susie Kung, Manukau Institute of Technology, New Zealand

Mary Moeke, Manukau Institute of Technology, New Zealand

There is growing interest in inquiry groups as a forum for self-study, reflection and professional growth. This presentation traces the beginnings of an inquiry group that was used for building team capability, team cohesion and team vision. This inquiry group had inspired further individual/collaborative self-study groups necessitate by rapid, relentless changes to teacher education borne out of the Covid-19 pandemic. This presentation reports on a self-study project by two teacher educators who had examined the tension of moving online at short notice in a field-based teacher education programme. They sought to investigate the impact of these rapid changes on teacher identity, teacher professional practice and teacher resilience. This presentation outlines the self-study process with one researcher weaving the principles of Appreciative Inquiry and the other researcher the E Tu Whaanau Theory of Change into the Self-study process. Emerging findings from this collaborative self-study project included the significance of teacher identity on teacher well-being, teacher retention and resilience; core teaching beliefs provides the anchor and foundation for surviving and thriving in times of rapid change in teacher education and the self-study process is a reliable tool for critical reflection and a means to resolve tensions between teacher beliefs, teaching philosophy and professional practice. Implications of the findings to teacher education, teacher educator's professional development and tertiary teaching will be discussed. This is with the intention of drawing the audience to a discussion on the use of self-reflective practice in the life of teacher educators.

11:55-13:35 | Room G

# Saturday Online Presentation Session 2

Learning Experiences, Students Learning & Learner Diversity

**Session Chair: Sirichom Pichedboonkiat**

**11:55-12:20**

74842 | *Students' Perceptions of Virtual Laboratories in University Physics Classes for Engineers*

Rim Gharbi, The Mediterranean Institute of Technology, Tunisia

Rim Gouia, The Mediterranean Institute of Technology, Tunisia

The integration of virtual laboratories (VLs) into teaching is increasingly in demand especially after Covid-19 due to their potential to enhance the learning experience and the possibility of implementing distance learning in higher education. They can either serve as a replacement for or complement to on-site laboratory learning. This research aims to assess students' perception of the effectiveness of VLs in undergraduate Physics courses focusing on two research questions: 1) How do students perceive the effectiveness of using VLs in helping them to understand theoretical concepts? 2) What advantages and disadvantages, if any, do students report for the use of VLs as a learning tool compared to on-site laboratories? To address these questions, A questionnaire-based study was conducted at South Mediterranean University in Tunisia to gather data from undergraduate engineering students' perceptions of using VLs in physics courses in terms of attitude, usefulness, satisfaction, and overall experience. The study results indicate that integrating VLs in undergraduate physics courses had a positive effect on students' perceptions and experiences with 57.5% of students expressing a preference for VLs over on-site laboratories. VLs were viewed as a useful tool that enhanced and facilitated their learning experience. Nevertheless, some students expressed disadvantages of VLs and emphasized the importance of physical experiments. Therefore, adopting a BLENDED LABORATORY offers a promising approach for transforming learning in education. By sharing their experience, the authors aim to inspire and encourage other educators to explore the vast potential of incorporating VLs into their educational contexts which can greatly improve academic performance.

**12:20-12:45**

75847 | *Community Based Learning in Business Education: Is it Effective and What are the Challenges?*

Lewis Teo Piaw Liew, Politeknik Kuching Sarawak, Malaysia

Melissa Audrey Adriana Liu Abdullah, Politeknik Kuching Sarawak, Malaysia

Khatijah Binti Ibrahim, Politeknik Kuching Sarawak, Malaysia

Community Based Learning has been practiced by Higher Education Institution in Malaysia with the aspiration to produce graduates who are capable to apply the theories and concepts to real-life context. However, there has been little information about its' effectiveness. This study intends to investigate the effectiveness of Community Based Learning in Business Program particularly the capstone project in Business Program offered by Polytechnic Malaysia and the challenges faced by the students. The qualitative method is employed to gather the reflections on the process and outcome of the experience via interviews with 36 students from 2 cohorts. Thematic analysis is used to interpret the data and the findings show that the capstone project activates the learning outcomes of academic knowledge, general skills, practical competencies, personal growth and civic responsibility while lack of resources and self-incompetence are the two main challenges faced by students. The findings of this study offer insights into the process of aligning related policy with Community Based Learning as well as demonstrating support for Community Based Learning.

**12:45-13:10**

76178 | *Teaching and Learning Experiences of Faculty and Students During Hyflex Classes at the Elementary School Division*

Claire Guevara, Jose Rizal University, Philippines

Roland Dalloran Jr., Jose Rizal University, Philippines

The pandemic brought by COVID-19 has led to intense changes in the way teachers deliver their lessons and how learners participate in the discussion of the lessons. Jose Rizal University (JRU) in Mandaluyong City, Philippines goes on full online teaching and learning modality during the first two years of the pandemic using the Canvas as its Learning Management System. For the school year 2022-2023, the institution will adopt the HyFlex learning modality. HyFlex sees teachers teaching students at the same time in a physical classroom and synchronously online through video-conferencing software. This study investigated the implementation of the Hyflex learning in the said academic year. This study considers the learning experiences and perceptions of grade 6 students who along with the elementary school teachers and ten educator-observers. The findings such as; strategic classroom setting must be explicitly planned and key enabling equipment must be considered to further enhance technology and classroom setting, more training must be conducted on Hyflex Learning -Teaching to address identified possible issues or challenges, and cogent guidelines must be provided to pupils for them to be aware of the norms in a HyFlex classroom will be used for the preparation of the full implementation of the Hyflex modality for the SY 2022-2023.

**13:10-13:35**

74959 | *Integrating Teaching and Learning to Promote Knowledge, Creativity, and Work Skills for Students in Science-Based Technology Demonstration Classes, Thailand*

Sirichom Pichedboonkiat, Rajamangala University of Technology Lanna, Thailand

Niwat Moonpa, Rajamangala University of Technology Lanna, Thailand

Amnouy Kamboon, Rajamangala University of Technology Lanna, Thailand

The research aimed to 1) combine teaching and learning approaches in a way that enhances knowledge acquisition among pre-engineering students at the vocational certificate level, 2) to assess and compare the learning outcomes of students who were exposed to project-based learning management, 3) to explore and analyze how project-based learning management influenced students' creative abilities, and 4) to evaluate student satisfaction towards project-based learning management. The Population of this study involved 14 pre-engineering students at the vocational certificate level. The instrument used for data collection was a project-based learning management plan that consisted of five learning activities. Additionally, a test was administered to measure students' ability to learn and create works, and a student satisfaction questionnaire specific to project-based learning management was used. Mean and standard deviation were likely utilized to summarize and describe the central tendency and dispersion of the data. An independent t-test may have been applied to compare the learning outcomes between different groups. The research findings indicated that the integration of teaching and learning through project-based learning management positively impacted students' knowledge, creativity, and practical skills. Students demonstrated a good understanding of the subject matter and were able to apply their knowledge in real-world scenarios. They also displayed creativity, innovation, and critical thinking in the projects they undertook. Overall, students' satisfaction with project-based learning management was highest, indicating their positive perception of the learning approach.

13:50-15:30 | Room G

# Saturday Online Presentation Session 3

Higher Education

Session Chair: Chen Kun

13:50-14:15

75216 | *Investigating the Dimensions for Understanding the Self: A Pilot Study*

Sol Denamarca, Iloilo State University of Fisheries Science and Technology, Philippines

Bernie Bayogos, Iloilo State University of Fisheries Science and Technology, Philippines

Rizza Gumbao, Iloilo State University of Fisheries Science and Technology, Philippines

Understanding the Self is a course offered for Tertiary Education in the Philippines. This pilot study was conducted to test the effectiveness and usability of the dimensions used in Understanding the Self as a framework for self-identity. As students constantly interact with society, they increasingly look for indicators of belonging. The self-identity framework, consisting of dimensions related to "Physical Self," "Material Self," "Sexual Self," "Spiritual Self," "Political Self," and "Digital Self," was used to encompass the key aspects of Understanding the Self. Participants (N=30), students participated in the study; they completed an online questionnaire comprising items from the different dimensions. Data were collected on participants' self-identity on various aspects of Understanding the Self. Cognitive interviews were conducted to gain insights into the participant's perceptions and understanding of the items used in the framework and its dimensions. Findings suggest that the framework demonstrates usability as participants reported finding the item wordings easy to understand and the dimension being measured understandable. Analysis reveals variations in response, but a relatively similar result, which was not unexpected, was observed. The feedback from the participants established the importance of context in trying to understand and respond to specific items in the questionnaire. The pilot study provided insights into the usability and effectiveness of the framework; further refinements are needed based on participants' suggestions and feedback. The study may be helpful as an essential step in developing a comprehensive tool for measuring self-identity under the Understanding the Self framework to explore different aspects of formation.

14:15-14:40

76245 | *Employability on Self-Perception Among IT Students: The Effects of Intrinsic Motivation and Academic Performance*

Waraluck Maprasom, King Mongkut's University of Technology Thonburi, Thailand

Surachai Suksakulchai, King Mongkut's University of Technology Thonburi, Thailand

Prapassorn Wongdee, King Mongkut's University of Technology Thonburi, Thailand

The primary objective of higher education in Thailand is to prepare students for future careers. However, some students are uncertain about their ability to find employment. Therefore, this study investigated the relationship between intrinsic motivation, academic performance, and self-perceived employability, and aimed to create a predictive model of IT students' self-perceived employability. The sample group for the study comprised 420 students from the Department of Information Technology, Faculty of Business Administration, Rajamangala University of Technology, from nine campuses across Thailand. Data was collected using online questionnaires and analyzed using Pearson's correlation coefficient and multiple regression analysis. The results showed that intrinsic motivation, academic performance, and self-perceived employability were positively correlated. The multiple correlation coefficient was between 0.75 and 0.95. Additionally, it was found that intrinsic motivation and academic performance can predict students' self-perceived employability with a significance level of 0.05. The findings of this study suggest that the teaching and learning process should be designed to improve intrinsic motivation and academic achievement. This may be accomplished through providing students with stimulating and engaging learning experiences, as well as chances to learn in a supportive setting. As a result, students may gain the confidence they need to find job after graduation.

14:40-15:05

73160 | *Determinants of Career Adaptability of Undergraduates in Malaysia*

Low Choon-Wei, Universiti Tunku Abdul Rahman, Malaysia

Cheng Ming-Yu, Universiti Tunku Abdul Rahman, Malaysia

Ng Kar-Yee, Universiti Tunku Abdul Rahman, Malaysia

Career adaptability refers to the ability to adapt to changing tasks and engage in continued self-learning. It is important to respond to the changing demands of employers. Undergraduates are the future talents of a country. Their readiness to join the dynamic labour market is important to be examined. Thus, this study examines the factor affecting career adaptability among undergraduates in Malaysia. An online questionnaire was disseminated to undergraduates using Microsoft Forms. The questionnaire consists of questions on career adaptability, career decision-making self-efficacy, proactive personality, and academic performance. After filtering the responses received, the regression analysis includes 171 responses from undergraduates. Results show that career decision-making self-efficacy, proactive personality, and academic performance are positively related to career adaptability. This study found career decision-making self-efficacy and proactive personality have significant influences on career adaptability. Universities are recommended to encourage undergraduates to participate in extracurricular activities to have the opportunities to enhance their decision-making skills and develop their ability to take initiative.

15:05-15:30

75963 | *Investigating Key Determinants Influencing the Improvement of Students' Potential and Employability via Smart Campus Platform at Guangdong Vocational College, China*

Chen Kun, Rajamangala University of Technology Thayanburi, Thailand

Kitipoom Vipahasna, Rajamangala University of Technology Thayanburi, Thailand

Building the essential competencies in the professional field that help increasing the employment rates are the major challenge for overall vocational colleges in China. As they are extremely difficult and limiting the in-depth analysis of this correlation of success factors. This study aims to delve into the current academic performance of students at Guangdong Vocational College and their employment status in their respective fields of study. We discovered how the Integrated Smart Campus Platform significantly affects academic achievements and the employability rate of graduates. We identified a series of key determinants that have a profound influence on student's academic success and employability rate based on a comprehensive statistical analysis. The sample comprised 100 students, 20 teachers, and 10 school administrators from Guangdong Vocational College, China. Through Principal Component Analysis (PCA) and Multiple Regression Analysis (MRA), we discerned that: 1) The Integrated Smart Campus Platform plays a pivotal role in elevating academic performance and the employability rate of graduates, accounting for 68% of the variance; 2) Approximately 83% of students, teachers, and administrators actively engaged with the platform, expressing a 76% satisfaction rate; 3) Technical support and professional training emerged as the key factors in enhancing the efficiency and satisfaction rate of platform usage, with respective influence values of 0.45 and 0.38. This research offers valuable insights into the realm of higher vocational education, showcasing the potential of technology in bolstering student potential and employability rate.

# Virtual Poster Presentations

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

# ACE2023 Virtual Poster Presentations

## Counselling, Guidance & Adjustment in Education

73778 | *A Quantitative and Qualitative Evaluation of a Growth Group Program for Empathy Training*  
Yi-Hsing Hsieh, National Changhua University of Education, Taiwan

Empathy can be conceptualized as three components: cognitive capacity, emotional capacity, and expressive and communicative motive. A growth group program is designed to comprise these three components of empathy. Mu wave (8-13 Hz band) in human electroencephalography (EEG) is a signature of mirror neurons which involve in social functions such as empathy and theory of mind. This study aims to investigate whether a growth group can not only improve the knowledge and performance but also change the activity of the mirror neuron system. Among twenty-seven undergraduate students selected from a class of taking a general education course, fifteen students are randomly assigned to the experimental group to attend a growth group. Twelve students are randomly assigned to the control group to attend a regular psychology class. After ten times of meetings, both control and experimental groups receive the measures of an empathy scale and then EEG. Participants' feeling and thoughts after the meeting were recorded for a qualitative analysis. The results show that the experimental group performs better than the control group on the testing scores of empathy scale. Mu wave suppression measured from Cz electrode site is significantly larger in the experimental group compared to the control group, indicating that mirror neurons are more active under the condition of self-movement in the experimental group. The qualitative data show that participants feel more confident with using empathic skills in their daily life. The conclusion is that a growth group for empathy training can change the behavior and the brain to some extent.

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

76014 | *Examining Special Education Teachers' Implementation of Self-Determination Instruction and Its Impact on the Academic Performance of Students with Disabilities*  
Pen-Chiang Chao, National Taiwan Normal University, Taiwan  
Yu-Chi Chou, Chung Yuan Christian University, Taiwan

Purpose of this study was to investigate special education teachers' implementation of self-determination instruction and whether their gender, age, grade level taught, and teaching experience will influence the status of instruction. The relationship between self-determination instruction and academic performance of students with mild disabilities and how well the former can predict the latter were also examined. Subjects were special education teachers (N = 883) recruited from elementary and junior high schools nationwide in Taiwan using the probability sampling method. One hundred fifty-three students with specific learning disability and intellectual disabilities also participated in this study. The Teaching Self-Determination Scale, a standardized scale, was used to evaluate the status of self-determination instruction in four areas including self-realization, psychological empowerment, self-regulation, and autonomy. Data collected were analyzed using descriptive statistics, t tests, analyses of variances, correlation analyses, and regression analyses. Findings showed that overall special education teachers demonstrated a level of "between occasionally and always" in teaching self-determination. Female teachers demonstrated a significant higher level of self-determination instruction than male teachers. In addition, junior high school teachers had a higher level of self-determination instruction compared to their elementary school counterparts, especially those who are older or have more teaching experience. Lastly, there was a positive correlation between self-determination instruction and students' academic performance. Psychological empowerment and autonomy were the two that best predict students' academic performance, explaining 23% of the variance of academic performance. Suggestions and implications are provided.

76017 | *The Construct Study on the Mindset Scale of Primary Gifted Students*  
Min-Ying Tsai, National Pingtung University, Taiwan

The purpose of the study was to construct the cognitive mindset scale for primary gifted students. 120 elementary school students were participated in the pilot study, and there were 908 gifted students in the formal study. Item analysis, exploratory analysis, and confirmatory factor analysis were adopted in the study. The conclusion was found that the cognitive mindset scale was made of two subscales with 14 items, including fixed mindset with 6 items and growth mindset with 8 items. The composite reliability was 0.94 and The Cronbach alpha efficient were 0.91 and 0.93. The Average Variance Extracted were 0.65 and 0.64. The reliability and validity of the scales were good.

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

73963 | *The Effectiveness of Comprehensive Sexuality Education in Weakening Explicit and Implicit Attitudes Towards Gender Bias Among Chinese University Students*  
Mingqi Lu, Beijing Normal University, China

Comprehensive Sexuality Education (CSE) aims to foster the development of children and young people in the realm of gender equality and has achieved numerous positive achievements in addressing gender-related issues. However, little is known about the effectiveness of CSE interventions on gender bias, particularly regarding implicit gender bias. Considering the adverse impact of gender bias on achieving gender equality in real life. Therefore, the present study aims to explore the potential of CSE intervention to weaken explicit and implicit gender bias among university students. A quasi-experimental intervention design was employed to assess the pretest-posttest measurements of explicit and implicit gender bias using a self-report questionnaire and Implicit Association Tests (IAT) respectively. Following a 5-month CSE intervention consisting of 36 sessions with university students, ANOVA was conducted to compare differences between the intervention group (N=97) and the control group (N=68). The findings revealed that the CSE intervention not only effectively reduced explicit gender bias but also significantly diminished implicit gender bias. Additionally, the CSE intervention effects exhibited differences across dimensions and sex. These results indicate the positive impact of CSE intervention on gender bias and provide valuable insights for future intervention strategies and evaluation approaches.

# ACE2023 Virtual Poster Presentations

## Educational Policy, Leadership, Management & Administration

76066 | *The Relationship Between Evaluation Use and Teacher Effectiveness in School Self-Evaluation*

Mingyao Li, Beijing Normal University, China

Lingyan Li, Beijing Normal University, China

Zhihong Zhang, Beijing Normal University, China

School self-evaluation is regarded as an effective way to promote teachers' professional development. Evaluation use plays a key role in this process. Previous studies have focused on describing the process of evaluation use, but have not examined the value added that evaluation use brings to teacher effectiveness. This research divides evaluation use into individual use and organizational use, and explores the relationship between these two dimensions and teacher effectiveness increment. Data were collected from 3,676 teachers in 23 secondary schools who participated in school self-evaluation. The research found that in school self-evaluation, on the basis of controlling the initial teacher effectiveness, the individual use of school self-evaluation can positively predict the later teacher effectiveness, and the lower the initial teacher effectiveness, the higher the regression coefficient. The organizational use of school self-evaluation only adds value to teacher effectiveness for teachers with higher initial teacher effectiveness or higher individual use. For teachers who are not active in individual use, no matter how high organizational use is, it is not helpful to improve their teacher effectiveness. This research reveals the relationship between organizational factors and personal factors in teacher professional development, which is helpful for school leaders to making appropriate school self-evaluation policies to promote teacher professional development.

## Foreign Languages Education & Applied Linguistics

76029 | *How Does Adult Learners' L1 Interact With Word Frequency in the Error Rates of Chinese Classifier Use: A Cross-Comparison Study*

Kun Yu, The Hong Kong University of Science and Technology, Hong Kong

Korean is a classifier language, while English is not. It is logical to assume that L1-Korean learners may perform better than L1-English learners on the acquisition of Chinese classifiers. However, research has shown that the difference is minimal and only occurs at the beginner and advanced stages (and not intermediate; Liang, 2008). We hypothesize that any possible advantage for Korean learners might depend on classifier frequency instead; namely familiarity with L1 classifiers may benefit L1-Korean learners' acquisition of higher-frequency (lower-difficulty) L2 classifiers only. Chinese classifiers are categorized into pre-established frequency bands A to C in descending order of word frequency (Wang, 2017), and sentences that contain the classifiers written by L1-Korean and L1-English learners (i.e. aggregate data from US, UK, Australia, Canada) were extracted from the HSK Dynamic Composition Corpus. Two native Mandarin speakers reported the error rates, with a 93% inter-rater reliability. Welch's two-sample t-tests were conducted to compare the mean error rates between L1-Korean and L1-English learners for high-frequency classifiers (Band A) and low-frequency classifiers (Band B+C) respectively. Unexpectedly, results showed no significant group difference for Band A classifiers ( $t(871.51) = -0.89, p = .38$ ), while a significant group difference was found for Band B+C classifiers ( $t(285.14) = -4.242, p < .001$ ), but with a reverse trend than predicted: L1-Korean learners had a higher error rate than L1-English learners. One possibility is that due to a lack of classifiers in their L1 inventory, L1-English learners might be more cautious in applying them in written sentences, while L1-Korean learners are perhaps more comfortable using classifiers even erroneously.

75215 | *Exploring Artificial Intelligence as a Social and Literacies Practice: Students' Academic Writing Experiences*

Zhanel Zakirova, Nazarbayev University, Kazakhstan

Advancements in technology have significantly transformed existing literacy practices. Students increasingly employ artificial intelligence (AI) assistants for academic writing, leading to noteworthy changes in their writing habits. Some students use AI for its various affordances for writing, which helps students identify their writing issues (Lin & Chang, 2020), correct errors (Dodigovic, 2007), and provide autonomy (Thi et al., 2022). Studies also indicate that Kazakhstani students might use AI to cope with academic writing challenges (Ablazimova, 2022; Batyrkhanova, 2020; Kuttubayeva, 2022). The existing literature on AI-based writing assistants has mainly focused on teachers' opinions and students' writing outcomes when using a particular type of AI software. However, there is still a scarcity of literature that analyzes writing with AI as a literacy event in which students develop new literacies and AI as a cultural tool that mediates literacy. Furthermore, the literature emphasizes the lack of studies focusing on the Kazakhstani context. Therefore, the present study will adopt a qualitative case study approach to describe how AI-based writing assistants shape new literacy practices in academic writing among graduate students at one Kazakhstani EMI university. The study will be based on the perspective of literacy as a social practice. Data will be collected from 10 graduate students using focus group interviews, a questionnaire, and an ABR tool 'significant circle.' Thematic analysis will be used for data analysis. The findings might contribute to the body of literature on literacy as a social practice and facilitate our understanding of the new ways of defining literacy in the era of technology and AI.

# ACE2023 Virtual Poster Presentations

75907 | *Using Peer Assessment as a Tool to Improve EFL Students Speaking Skills*  
Madina Zhussipova, Nazarbayev Intellectual School in Aktau, Kazakhstan

This study examines the impact of peer assessment and feedback on secondary school EFL (English as a Foreign Language) learners' speaking skills. By providing a platform for students to evaluate each other's performance, peer assessment can help overcome shyness and fear of making mistakes. The study employed CAR (Classroom Action Research) following Kemmis' cycle process (in McNiff: 1992:27) through planning, acting, observing, and reflecting in a spiral model. The evaluation focused on whether peer assessment was effective in developing EFL learners' speaking skills and how peer feedback affected students' speaking performance. The study involved 25 students of A2/B1 level at Nazarbayev Intellectual School in Kazakhstan. Personal observations, questionnaires, and speaking tests were used to collect data. Analysis of speaking results showed an increase from 63 in pre-test to 69 in Cycle 1 and 75 in Cycle 2, illustrating the effectiveness of peer assessment as a learning tool. However, giving feedback to peers was only effective in pair work between Higher-Lower or Average level students, with the latter sometimes struggling to implement constructive feedback to Higher level students. Despite drawbacks, most students had a positive attitude towards peer assessment and receiving feedback from their classmates. This form of assessment can be incredibly advantageous for students, offering a unique opportunity for self-learning and differentiation. Additionally, it provides teachers with a valuable tool for assessing their students' potential and enthusiasm.

## Higher Education

72815 | *Preparing E-Tutors for Success: A Qualitative Analysis of a Community Management Training Module for Students*  
Lisa-Marie Langesee, TU Dresden, Germany  
Nick Volkmann, TU Dresden, Germany  
Alexander Clauss, TU Dresden, Germany  
Laura Hilse, TU Dresden, Germany

Just as corporate community managers are responsible for digital and cross-location collaboration in corporate communities, their counterparts in the university context - e-tutors - deal with the moderation and support of virtual group work. Here, e-tutors have a variety of tasks that go beyond merely monitoring their supervised groups. They need to be equipped with numerous competencies to ensure successful e-tutoring. This study investigates the gap on how a qualification module for e-tutors should be designed to prepare them best. For this purpose, seven participants in an e-tutor qualification module were interviewed. It was found that the qualification module had gaps in the training of intercultural competencies, which in turn influenced the interviewees' readiness to become e-tutors. Additionally, beneficial formats for competence development were identified. The study found that Virtual Collaborative Learning (VCL) is a helpful format for developing several competencies, particularly media competencies. In addition, certain framework conditions must be given to attract students to the module, e.g., practical relevance or the acquisition of certificates. Based on the findings, the study provides recommendations for designing a qualification module for e-tutors, including the importance of addressing intercultural competencies, incorporating e-tutor tandems, and providing VCL opportunities. The study also discusses the implications of its findings, including the direct impact of the module on the next generation of e-tutors. In conclusion, this study offers insights into the development of competencies for e-tutors and provides practical recommendations for enhancing the e-tutoring experience.

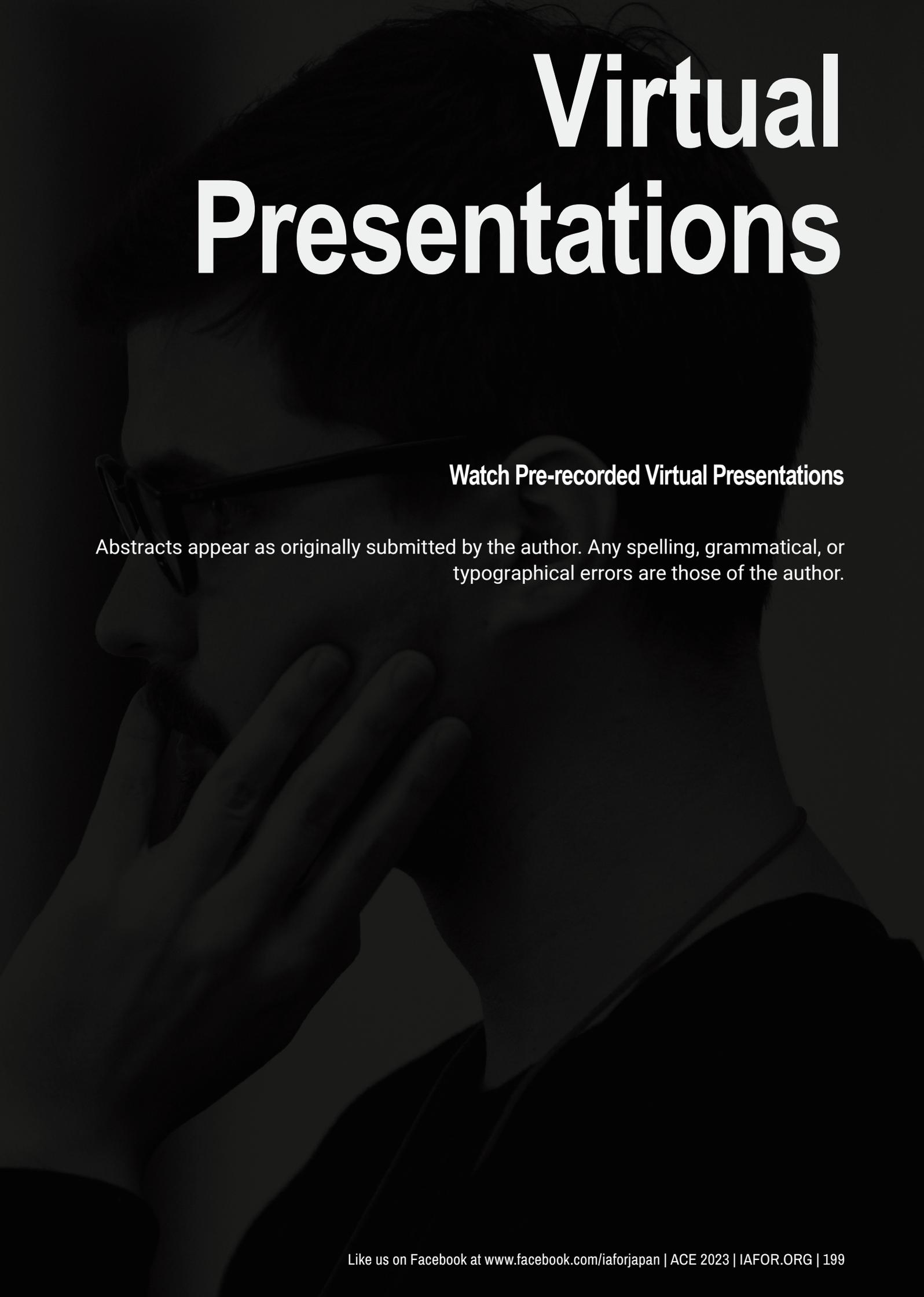
## Teaching Experiences, Pedagogy, Practice & Praxis

75983 | *Developing an Online ART Course Template for Enhanced Teaching Experiences*  
Kristine Kim, Kennesaw State University, United States

In arts education, integrating online platforms has revolutionized how artistic skills and concepts are shared and learned. This paper proposal aims to delve into the design, development, and implementation of an online ART course template meticulously tailored to provide educators and learners with an enriching and empowering artistic journey. The proposed template seeks to unite pedagogical expertise with creative expression, fostering an environment that nurtures artistic growth and meaningful learning experiences. The paper will explore the foundational principles underlying the creation of the ART-focused online course template. It will address the unique online course template development challenges and opportunities posed by teaching creative disciplines online, such as integrating visual elements, multimedia tools, and experiential activities. The template aims to offer educators a comprehensive framework that balances the technical aspects of art instruction with the cultivation of individual artistic voices. Central to this proposal is examining innovative approaches to creative engagement within the template. The paper will showcase strategies for using video demonstrations, virtual galleries, peer critiques, and collaborative projects to foster a sense of artistic community and shared exploration. The template aspires to transform the virtual learning space into a vibrant art studio by infusing interactive elements. Furthermore, the proposal will discuss the role of personalized learning journeys within the template's design. Educators are encouraged to tailor the template to various art forms, skill levels, and creative objectives while benefiting from a structured foundation that enhances teaching effectiveness.

73554 | *Enhancing Students' Self-Awareness and Self-Management Social-Emotional Learning (SEL) Competencies Through the Senior High School Art Performance Task Module*  
Ivy Brioso, PAREF Rosehill School, Philippines  
Carmela Oracion, Ateneo De Manila University, Philippines

Educators have been more conscious of incorporating Social and Emotional Learning (SEL) in their instruction to support student's well-being as schools transition back to face-to-face classes after the pandemic. The practical nature of the arts subjects provide opportunities for supporting students' SEL. Various studies have affirmed arts education's impact on SEL development in the United States but it is still to be explicitly incorporated in the Philippine art curriculum. The purpose of this Capstone Project was to develop a module for the Senior High School Contemporary Arts course to enhance students' Self-Awareness and Self-Management SEL competencies by focusing on the artistic process of creating. CASEL's (2023) and ArtEdSEL's (2023) frameworks were instrumental in crafting the Performance Task (PT) Module. Following Laverick's (2002) B-D-A strategy, the PT module was organized into three phases of the creative process beginning from generation of ideas (before), implementation (during) until integration (after). The organization of the module helps students discover and use personal strengths to manage and succeed in the task. The purposeful integration of SEL through the PT module can enhance the art curriculum through an integrative creative experience and serve as a flexible template for the planning of other art activities, as well as tasks in non-art subjects, adjusted to the developmental needs of the students. It is also a helpful tool for the art educator's growth in SEL competencies.



# Virtual Presentations

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

# ACE2023 Pre-Recorded Virtual Presentations

## Adult, Lifelong & Distance Learning

73524 | *Enhancing Adult Learner Interactions in Asynchronous Online Discussions: Exploring the Use of Video Timeline-Anchored Comment Tool (VTC)*

Xi Lin, East Carolina University, United States

Qi Sun, University of Tennessee, Knoxville, United States

This study presents research using Video Timeline-Anchored Comment (VTC) to increase learners' interactions for asynchronous online discussions. This innovative human-computer interaction tool allows learners to watch video-based lectures while commenting on the content and peers' thoughts or asking questions. Using Moore's three types of interaction framework (i.e., student-content, student-student, and student-instructor), this qualitative study examines the use of the VTC tool to discuss video-based lectures in an asynchronous online course to discover learners' interactions with the content, peers, and their instructor. A total of 24 instructional videos were presented through Canvas Studio—the learning management system that offers the VTC function. Data on learners' perspectives were collected through an end-of-semester survey adapted from Brookfield's Critical Incident Questionnaire, which yielded responses from 23 out of 30 enrolled students. Thematic analysis was conducted to identify key themes and insights from the learners' feedback. Data analysis reveals four major themes regarding their experiences using the VTC tool: 1) Developing a sense of real-time interaction, 2) Increasing interaction and engagement, 3) Preventing monotony and becoming more attentive and concentrated, and 4) Improving understanding of content. The findings indicate that the VTC tool can motivate asynchronous online learners to interact actively with the instructor and peers and increase their cognitive presence. This tool could also create a real-time connection between online lectures and offline social networks in an asynchronous learning environment. Our study indicates that incorporating this new tool in an online learning environment could enhance and sustain adult learners' interactions, thus promoting active learning.

## Challenging & Preserving: Culture, Inter/Multiculturalism & Language

75902 | *Access and Utilization of Health Care Services Among the Lumad Young Mothers*

Nona Krislin Jopillo, Mindanao State University-Iligan Institute of Technology, Philippines

Rizalina Gomez, Mindanao State University-Iligan Institute of Technology, Philippines

This study aims to investigate the access and utilization of health care services among Lumad young mothers in Rogongon Iligan City, Northern Mindanao, Philippines. The Lumad of Iligan City is a group of indigenous peoples collectively called the "Higaonon". Respondents were chosen on purpose based on the following criteria: (1) they are pure Lumad young mothers ages 15-25. (2) resident of Rogongon for at least 5 years; and (2) willingness to participate in the study. Self-made open-ended questions focused on access and utilization of health care services were raised during the interview. A total of fifteen cases were investigated in a one-on-one interview. Using qualitative thematic analysis, Three important themes emerged from the study which includes: (1) barriers to access, (2) awareness and education, and (3) cultural considerations. Results revealed that health care access and utilization rates were found to be significantly low among indigenous populations. Considering the distance of the Higaonon villages, young mothers in very remote areas find it difficult to access the appropriate mainstream primary health care services and medical assistance from the government. Provision of medicine from the barangay clinic was found to be very minimal. Emergency cases and major health care problems that require hospitalization cannot be responded immediately. This study concludes an inept health care delivery system for Indigenous people. Thus, it is recommended for the government to come up with an effective framework to intensify healthcare services and provide a culturally sensitive type of education for the Lumad.

## Curriculum Design & Development

75082 | *Safeguarding Assessment Integrity in the Digital Age of Generative Artificial Intelligence Through Teamwork and Self/Peer Evaluation*

Tomayess Issa, Curtin University, Australia

Mahnaz Hall, Curtin University, Australia

Teamwork and self/peer evaluation aim to encourage students to improve their teamwork, communication, cultural awareness, and problem-solving skills and to transform students into independent learners. The study's rationale is to assess our teamwork framework in the ISYS5001 Business Project Management postgraduate unit by integrating academic integrity standards, allowing students to complete their work in a team-based environment with detailed assessment guidelines and the lecturer's formative feedback. This approach will minimise the use of generative AI tools such as ChatGPT, Bard and Bing Chat (Dwivedi et al., 2023; Volante et al., 2023). To implement academic integrity in the teamwork assessment, the lecturer meets with each team member to discuss two concepts, OBS (Organisation Breakdown Structure) and WBS (Work Breakdown Structure), and provides formative feedback to improve their work. This meeting ensures the student's contribution is original and acknowledges the factors that encouraged them to complete the assessment. The marks are released based on a signed teamwork agreement, completed self- and peer-evaluation forms, PowerPoint slides, and the meeting's feedback. This study employed mixed methods, and to date 400 students have participated by answering the research question "How do students transfer into independent learners via the teamwork framework?" The study outcomes have indicated that students enjoyed this experience, learned new skills in team management, became problem solvers, gained cultural awareness, and the amount of cheating and the number of requests for extensions have decreased dramatically. Finally, a set of recommendations is presented to assist academics in implementing teamwork in future units.

# ACE2023 Pre-Recorded Virtual Presentations

74938 | *A Content Analysis of Middle Grade Geography Textbooks from the Sustainability Lens – An Indian Context*  
Bharti Dahiya, Tata Institute of Social Sciences, India

The paper analyzed the concept of sustainability in geography textbooks, developed and published by The National Council of Educational Research and Training (NCERT) at the national level. As the textbooks hold a critical role as a resource in the teaching-learning process at all levels of education. The present paper explores the content of geography textbooks, topics associated with sustainability. A content analysis approach is used to analyze the content available in the form of texts, visuals, activities, and exercises of grade 6th to 8th to explore the kind and extent of promotion to sustainability education in Indian formal school education. The UNESCO's Earth Charter (EC) framework of education for sustainability and Bloom's taxonomy (six cognitive categories) has been used to analyze the topics linked to sustainability. The study reported an over-emphasis on the principle of ecological integrity with an anthropocentric approach. The explicit mention of the definition of sustainable development and its principle was reported in grade 8th. At entry level of middle grade, activities focused on appreciating and caring for flora and fauna around them. Textbooks focuses more on providing the distribution, and factual information for remembering rather than promoting holistic thinking for addressing sustainability issues.

69895 | *Characterizing an Emergency-Responsive Unit Plan in Senior High School Literature Courses*  
Nicole Capule-Malabanan, Philippine Normal University, Philippines

The purpose of this paper is to characterize an emergency-responsive unit plan by investigating the experiences of select Senior High School English teachers in an exclusive private institution and their literature unit planning documents before, during, and after an educational emergency. A qualitative method using descriptive study was utilized in the research work. Purposive sampling was done to determine the literature teachers who participated in the focus group interview which expounded on the characteristics of an emergency-responsive unit plan. Additionally, document analysis was made to compare and contrast components of the literature plans before, during, and after an educational emergency. The data collected from the discussions were thematically analyzed while data collected from unit planning documents were subjected to content analysis to characterize an emergency-responsive literature unit plan. As seen in the results, emergency-responsive literature unit plan includes (a) literary texts that reflect realities in a contextualized and timely manner, is relevant to learners' needs, and interest, elicit values that are apt for a challenging time, (b) formative or enrichment assessments that develop mastery of content, development of skills and attitude, and (c) learning activities that are equitable, learner-centered, and can develop students' socialization and agency. Despite the study being only limited to three subject teachers who are teaching two literature courses in the senior high school level, the results reaffirmed several pedagogical assumptions that can be further utilized to study and characterize an emergency-responsive unit plan in other subject areas and emergency contexts.

73097 | *Developing Psychosomatic Medicine Workshop Module for Medical Doctor*  
Andri Andri, Krida Wacana Christian University, Indonesia

Psychosomatic medicine (PM) is a field that explores the interplay between the mind and the body and how psychological factors can influence physical health. The author started psychosomatic medicine workshop for medical doctor in 2017 for medical doctors. Since 2017 the author already held 6 workshops in different regions in Indonesia. The module aims to equip medical doctors with a basic understanding of psychosomatic medicine, its key concepts, and its relevance in clinical practice. It started with definition and scope of Psychosomatic Medicine (PM) especially in the role of stress, emotions, and mental health in physical well-being in psychoneuroimmunology point of view. We also discussed about examples of psychosomatic problems in daily practice including and psychiatric comorbidity in medical illness. Assessment and diagnosis in PM is crucial as well as recognizing and addressing psychosocial factors in medical presentations. We also addressed how important psychoeducation and patient empowerment in dealing with psychosomatic problems in the module. We limit our approach in interventions only to pharmacological treatment and supportive psychotherapy. Case studies and practical applications of PM in daily practice is the core of the module. In our workshop we divided participants into groups and we provided participants with case examples to trigger discussions. We provided participants with current research trends in psychosomatic medicine and how to integrate psychosomatic medicine into evidence-based practice. Feedbacks from the participants was good, participants gave a score of 4.3/5 for satisfaction in attending this training.

73916 | *The Feedback from Students who Participated in the Cooperative Education Program, in the Printing and Packaging Technology Program*

Somsri Binraman, King Mongkut's University of Technology Thonburi, Thailand  
Phichit Kajondecha, King Mongkut's University of Technology Thonburi, Thailand  
Suchapa Netpradit, King Mongkut's University of Technology Thonburi, Thailand

This article aims to study the opinions of students who participated in the cooperative education program in the academic year 2565 (2022-2023) towards the employers, the cooperative education program coordinators, and the internship supervisors. The study utilizes a quantitative research method, which involves the entire population of participants, including employers, cooperative education program coordinators, and internship supervisors, totaling 55 individuals from 30 different organizations. A questionnaire was used as the data collection tool, and the data was analyzed using univariate statistics to provide information for reporting the progress of the curriculum in accordance with the AUN-QA criteria for teaching and learning management, as well as ranking the suitability and compatibility of the organizations with the curriculum of the Printing and Packaging Technology program under the Faculty of Industrial Education and Technology at King Mongkut's University of Technology Thonburi. This information will be used to evaluate and plan the future cooperative education programs for the next generation of students in the Printing and Packaging Technology program.

# ACE2023 Pre-Recorded Virtual Presentations

## Design, Implementation & Assessment of Innovative Technologies in Education

75943 | *The Contradictions of Implementing Flipped Classrooms at Pre-university Education: An Activity Theory Perspective*  
Sahrinizam Kasah, Maktab Duli Pengiran Muda Al-Muhtadee Billah, Brunei  
Muniratul-Ain Adnan, Maktab Duli Pengiran Muda Al-Muhtadee Billah, Brunei

A limited body of research has investigated on the factors that primarily affect the implementation of Flipped Classroom Model (FCM) at pre-university education. This study aims to uncover the contradictions that emerge when applying a whole-school FCM approach in a pre-university institution in Brunei Darussalam. The Activity Theory lens was applied to examine the intricate dynamics of FCM activities from various perspectives. Combining questionnaire data with semi-structured interviews revealed a multi-faceted view of the participants, shedding light on both the adoption and non-adoption of FCM. The discursive manifestations of the identified contradictions unveiled numerous dilemmas, conflicts and critical conflicts within the activity system. Interestingly, teachers' positive attitude and disinterest for FCM co-exist, primarily due to the 'conflicting' nature of the A Level curriculum within the pre-university education system. A range of contradictions emerged encompassing disparities in pedagogical approaches, lack of ICT skills and insufficient familiarity with FCM amongst teachers. Furthermore, the study underscored contradictions evident in students' struggle to embrace self-directed learning, coupled with a preference for procedural learning over conceptual learning, further exacerbating the conflicts within the activity system. These findings substantially contribute to our understanding of how participants are affected by contradictions inherent within and between the elements of the FCM activity system. By utilising Activity Theory as an analytical tool, educators, administrators, and researchers can proactively anticipate challenges and devise solutions to address contradictions that might hinder the effective integration of FCM within the existing pre-university education framework.

76021 | *From Analysis to Creation: Utilising the ADDIE Model for Developing an Educational Game for Children*

Nurul Nadwa Zulkifli, University Putra Malaysia, Malaysia  
Yufan Zhang, University Putra Malaysia, Malaysia  
Ahmad Fauzi Mohd Ayub, University Putra Malaysia, Malaysia  
Nur Raihan Che Nawi, University Putra Malaysia, Malaysia

Designing educational games for children is a topic that warrants attention, particularly when using the ADDIE model as a game development framework. In this exposition, we evaluate three notable children's video games to highlight the complexities associated with designing games for children. Additionally, we present the ADDIE model, a well-known instructional design framework, to our audience to elaborate on its potential applications within the video game industry. The importance of creating educational video games for children is emphasized in this discussion. The ADDIE paradigm offers game designers a structured approach to creating educational video games that are both enjoyable and advantageous to a child's growth and education. To summarize, the process of developing a children's video game entails numerous stages and components that demand considerable effort. Game designers may employ established methodologies like the ADDIE model to create educational games that provide young children with a fun and informative experience. Games that require children to utilize their analytical and problem-solving abilities and decision-making skills can equip them with essential life skills that they can use throughout their lives. A combination of constructivist and social learning theories may be utilized to foster educational play by promoting exploration, cooperation, and reflection. Designing engaging and educational video games for children necessitates a thorough understanding of child development and various learning theories. Based on the above analysis, this study also develops a children's educational game using the ADDIE model in order to explore the creation of educational games that are suitable for young children.

75973 | *Unveiling Parental Perspectives: Determinants of Behavioral Intentions and Usage Behaviors in Ubiquitous Learning During Crises*

Ghea Tenchavez, Assumption University, Thailand  
Somsit Duang-Ek-Anong, Assumption University, Thailand

This study investigated the determinants shaping the behavioral intentions and usage behaviors of parents from a private primary school in Samutprakarn, Thailand, towards ubiquitous learning (u-learning). Employing a quantitative approach, the research engaged 500 participants through an online survey questionnaire. The research design adopted a non-probability sampling technique. Prior to deployment, the questionnaire underwent validation and reliability checks through Item-Objective Congruence and pilot testing. Analyzing the data involved Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM). The study's outcomes unveiled that the perception of usefulness significantly influenced both attitude and the behavioral intention to engage with u-learning. Furthermore, the ease of effort directly impacted the willingness to adopt technology. Notably, behavioral intention played a pivotal role in driving the actual usage behaviors within the realm of ubiquitous learning. In contrast, factors such as perceived ease of use, performance expectancy, social influence, and attitude were deemed insignificant. Given the dominance of perceived usefulness as the primary driver in technology acceptance, closely trailed by effort expectancy, the study underscores the importance for technology developers, curriculum designers, and educators to integrate these facets when crafting effective strategies and u-learning systems suitable for primary school learners, especially during crises. This research sheds light on the intricate dynamics that influence parental attitudes and behaviors in adopting u-learning practices, offering valuable insights for optimizing educational approaches in times of upheaval.

# ACE2023 Pre-Recorded Virtual Presentations

76062 | *Instructional Design Model of Virtual Reality Digital Integration into Learning Design: An Experimental Case Study in Managerial Control Education*

Jean-Yves Le Corre, Xi'an Jiaotong-Liverpool University, China

Virtual reality technology is widely recognized for offering the potential for fully immersive environments that can enhance learners' cognitive development. This paper introduces a framework that guides the creation and integration into learning design of Virtual Reality digital contents that are pedagogically structured and combined to support cognitive learning. A series of situated scenarios are created and implemented in the design of the learning process supported by a Learning Management System interfaced with a Virtual Reality platform. The instructional design framework is developed by conducting an experimental case study utilising a learning prototype to examine the impact that the immersive learning environment on learner's cognitive development, more specifically on learners' behavioural intentions in response to socio-cognitive conflicts encountered when learners interact in groups along the process of knowledge construction. The case study features a management accounting course where learners prepare for a dashboard of performance indicators under constructivist-based instructional strategy. The pedagogical value of the framework is to evidence that immersion in a reality-based environment and engagement with complex and ambiguous situations and information, as well as interaction with the space, can greatly enhance learning performance.

74556 | *Knowledge Transfer Impact on Small Medium Enterprises' (SMEs) Business Growth Within the Food and Beverages (F&B) Sector in Terengganu, Malaysia*

Engku Aiesyah Amirah Engku MD Azmi, University Sultan Zainal Abidin, Malaysia

Knowledge management was identified as a relevant foundational factor for small medium enterprises (SMEs)' business growth based on its universal and dynamic nature. SMEs face a range of challenges that necessitate a combination of education, experience, and the drive to actively engage in business strategies aimed at fostering growth and success. Knowledge management is also related to design in the context of branding strategy that fits into this study in answering the question of; what role branding strategy place in promoting SMEs' business growth within the food and beverages (F&B) sector in Terengganu, Malaysia? This study discovered that the level of brand awareness within SME F&B companies in Terengganu, Malaysia is very low. The majority of SMEs, especially microenterprises in Terengganu opted for printing shops as opposed to branding consultants or freelance designers to brand their products. This is reflected through SME business owners who understood branding to be only about packaging. They misunderstand the concept of branding when used as a strategy to promote business growth. Thus, effective knowledge management may impact SMEs to drive business growth by igniting intention, enabling concrete actions, and equipping them with the necessary tools to thrive in a competitive marketplace.

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

75021 | *The Current State and Challenges of Hungarian Music Schools: Special Educational Needs Students in the Focus*

Laura Majtényi, Eszterházy Károly Catholic University, Hungary

In the "country of Zoltán Kodály" music teaching, even today, is at international standards quality and instrumental education takes place in numerous institutions. In my presentation, I would introduce the educational system of Hungarian music schools, their opportunities and difficulties. Emphasising the education of students needing special treatment. (Special educational needs, integration-, learning- and behavioural difficulty, talent.) In the spring, I made a nation-wide questionnaire in which I asked instrumental music teachers - working in state-run institutions - about; the difficulties they face in connection with the education of special needs students, their attitudes towards self-development and further trainings. For this - Különleges bánásmódot igénylő növendékek a zeneiskolákban - hangszeres tanárok kérdőíve (Special Needs Students in Music Schools - Instrumental Music Teachers' Questionnaire) - 240 pedagogues responded. Answers came from every corner of the country. 62% of the respondents do not feel prepared educating special needs students, while 45% of them teach these students currently. 186 agree that lifelong learning is important, but 70% are not satisfied with the further trainings in the formal framework. For the question, whether they would like to join a further methodology training, 85% answered "yes". In light of these, my main goal is to reflect on the collected data by organising a further methodology training for music school teachers so that every child could receive appropriate musical education. I mean to present a part of all this work.

# ACE2023 Pre-Recorded Virtual Presentations

71629 | *A Study on Vocational Commitment and Related Factors of Special Education Assistants in Taiwan*

Yea-Rong Cheng, National University of Tainan, Taiwan

Chien-Hsiung Wu, National Kaohsiung Normal University & Dongshi Township Public Office, Taiwan

In recent years, Taiwan has invested a lot of resources in hiring special education assistants to assist students with disabilities and reduce the burden on special education teachers. Their job responsibilities include working under the supervision of teachers to meet their teaching needs, assisting classroom students with school learning and campus life, and many other tasks. It is important to ensure that special education assistants have a sense of vocational commitment and satisfaction in their work. The purpose of this study was to explore the vocational commitment of special education assistants and its related factors, with a total of 217 valid samples collected. The statistical analysis results showed that most special education assistants feel a moderate to a high degree of vocational commitment. Social support and job satisfaction were significantly positively correlated with their vocational commitment, and family support and professional communication are effective predictors of their vocational commitment. Therefore, how to strengthen family support and professional communication for special education assistants is an important issue. This study also puts forward specific suggestions for practical references, such as establishing a good family support system, promoting mutual understanding between class teachers and special education assistants, improving relevant compensation and welfare measures, continuously improving the professional development of special education assistants, and special education assistants should understand the sense of mission of their vocation.

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

75970 | *The Development of Public Relations Media on Online Platforms for Organizational Communication of Educational Institution in Thailand, KMUTT*

Thantika Kaewthae, King Mongkut's University of Technology Thonburi, Thailand

Pimmada Pongkunaporn, King Mongkut's University of Technology Thonburi, Thailand

The Faculty of Industrial Education and Technology, King Mongkut's University of Technology Thonburi (KMUTT), Thailand had a mission to communicate and publicize with a variety of target groups, including students, teachers, personnel, parents, enterprises, alumni and other agencies. Therefore, in the digital era it was necessary to rely on technology to play a role and act as an intermediary in communicating the institution content through the economical and fast channel such the online platforms. Therefore, the faculty corporate communication segment had designed and developed public relations media to communicate with 2 target groups: internal groups and external groups with 5 objectives and 8 types of communication channels on online platforms. The research tool used in this study was a satisfaction survey on the faculty public relations media. Using google form collected result from a sample of 20 people with purposive chosen from teachers and students who were the heavy users of the faculty public relations media (every day exposed). The result found that the sample were satisfied with the content aspect at the highest level ( $\bar{x}=4.61, S.D.=0.48$ ), with the media presentation aspect at the highest level ( $\bar{x}=4.75, S.D.=0.43$ ), and the overall aspect of public relations on online platforms at the highest level ( $\bar{x}=4.70, S.D.=0.46$ ), especially Facebook and Instagram media. Therefore, the designed and developed faculty public relations media could be used to communicate the faculty information with quality.

75025 | *Attitudes and Preferences of Nursing Undergraduates Towards Working Abroad: A Cross-Sectional Study in Vietnam*

HoangNam Tran, Tokushima University, Japan

The-Diep Nguyen, Thai Binh University of Medicine and Pharmacy, Vietnam

Thi-Hong Nguyen, Thai Binh University of Medicine and Pharmacy, Vietnam

Ngoc-Quang Phan, Thai Binh University of Medicine and Pharmacy, Vietnam

This cross-sectional study investigates the attitudes of undergraduate nursing students in Vietnam towards international study and work opportunities, as well as the factors influencing their preferences. Data was collected through a web-survey questionnaire in 2023, targeting students from a university in Vietnam, including participants in the Japanese language special program and regular program. The study findings emphasize the significance of international experiences, particularly in enhancing communication and cross-cultural skills, fostering personal development, and improving career prospects for nursing undergraduates. Moreover, students in the special program revealed distinct preferences when considering their ideal destinations for studying or working abroad. They placed a greater emphasis on factors like a clean and beautiful living environment, long-term job prospects, and festivities. Additionally, for those interested in pursuing postgraduate study abroad, the students favored universities that offered job hunting support, tuition exemption, and modern infrastructure. This study sheds light on the attitudes and preferences of Vietnamese undergraduate nursing students towards international study and work opportunities, highlighting the importance of such experiences for personal growth and career advancement in the nursing profession. The findings carry practical implications for educational institutions and policymakers, emphasizing the need to design programs that cater to the unique needs and preferences of nursing students seeking international opportunities.

# ACE2023 Pre-Recorded Virtual Presentations

75962 | *Inclusive Policy Formulation in Science Education for Biodiversity Conservation Utilizing Design Thinking*

Glenda Cruz, Western Philippines University, Philippines

Peter Ernie Paris, West Visayas State University, Philippines

The Palawan Corridor is home to a diverse and remarkable biological diversity. The highest peak in the province, Mount Mantalingahan Protected Landscape (MMPL), is a Protected Area and is considered sacred by the indigenous Pala'wan people. Its watershed provides the necessities of the community in terms of agriculture, drinking water, and livelihood. Although MMPL is protected by laws and regulations, it nonetheless suffers a threat to the environment because of its abundance of biodiversity and natural resources. This research provides solutions to community problems such as environmental issues, land use and delineation issues, institutional and governance issues, and socio-economic challenges. Design Thinking was employed in this research to explore the biodiversity conservation status to formulate research-based stakeholders' inclusive local policies. The participants were chosen based on inclusion criteria. Data was collected by immersing the researcher in the community. Focus groups were held along with interviews of informants, direct observations within the community, and mountain hikes to view their field were conducted. Thematic analysis was used to analyze the data collected. The three resolutions and one local ordinance formulated were evaluated and analyzed statistically using mean scores. Based on the criteria, statistical analysis showed that the formulated local policies were Above Average. This indicates that the formulated policies are sustainable, relevant, feasible, and politically viable. The findings prove that the formulated policies in line with Science Education intended for MMPL are helpful, hence, these were submitted to the Protected Area Management Board for utilization.

73496 | *At-risk Students in Delta State, Nigeria: An Exploratory Study on Home-school Partnership in Rural Secondary Schools*

Innocent Anazia, Ulster University, United Kingdom

There is overwhelming evidence that home-school partnerships can improve the academic outcomes of students, including those at-risk of disengagement. Therefore, the aim of this study, which is a funded PhD project, is to explore home-school partnership as a possible mechanism for addressing school dropout among at-risk students aged 12-15 years in Delta state of Nigeria. This is against the backdrop of the alarming rate of school dropout in the country. To guide the study, Bronfenbrenner's bioecological theory (Bronfenbrenner & Morris, 2006) underpins the theoretical framework of the study and Epstein typology of parental involvement is utilized as a conceptual framework to explore the practices characterising home-school partnerships in four rural schools in Delta State. A qualitative research technique was adopted involving interviews with parents and teachers and focus groups with students. Preliminary findings reveal limited engagement activities between homes of the students and their schools. Based on the findings, the study intends to develop a framework on home-school partnerships that can be utilized by disadvantaged schools to engage parents – the framework could be beneficial to other schools in similar contexts, especially in Africa.

74837 | *India's Digital Divide and Kerala's 'First Bell': A Radical and Alternative Form of Digital Education During COVID-19*

Mukulika Radhakrishnan, University of Sussex, United Kingdom

Education suffered one of the biggest blows due to Covid-19 in 2020-22. As educational institutes moved to digital-online teaching, 'digital divide' or the unequal access of the internet and other digital tools among students, turned out to be a major impediment in its proper conduct & success. In India, caste, class and gender barriers are major contributors to the digital divide, and with the pandemic, this also caused an increased chasm between those who could afford to learn despite difficulties and those who couldn't. This led to widespread discontent and protests by students of various ages across India, raising demands to reopen educational institutes, to provide students with free internet and other digital requirements etc. However, a small state in India's southern end called Kerala came up with an innovative and reformative form of pedagogy in the same period, that stressed on egalitarianism and justice. For a state with high television penetration, the Left-wing state government's well-structured 'First Bell' programme proved useful for students from all backgrounds, and when compared to other Indian states, was able to bridge the digital gap to a large extent. It democratised digital education by making the lessons not only available via the internet but on the government's TV channel too, and secondly, it provided and campaigned to provide students with free laptops, TVs and other gadgets required for e-learning. This paper is on 'First Bell' as a radical and alternative form of digital-online education, with an investigation of its methods, contributions and aftermath.

## Educational Policy, Leadership, Management & Administration

75955 | *Fostering Career and Life Development of Secondary School Students Through Effective School Self-Evaluation Mechanism*

Ellie Cheung, The Education University of Hong Kong, Hong Kong

Stephen Yip, The Education University of Hong Kong, Hong Kong

OECD (Mann, Denis & Percy, 2020) reported that in the survey of PISA (2018) 15 year-old students in OECD countries participate in career and life development (CLD) activities were relatively low (average 46%) and Hong Kong was merely 27%. An effective self-evaluation mechanism, as an important part of the quality assurance process, could support ongoing development of schools for quality education in helping students better prepare for their (Looney & Grainger Clemson, 2018). Hong Kong Benchmark for Career and Life Development (HKBM) which aims at fostering whole school approach quality CLD provisions to students (Holman & Stephen, 2020), enables school to review holistically its CLD provisions and identify directions for improvement according to the school contexts and the needs of students. The aim of the study is to evaluate the efficacy of adopting HKBM as the self-evaluation mechanism under the leadership of senior management in fostering schools' CLD provisions and thus participation of students in CLD related activities. Data were collected from 18 schools adopting HKBM as the self-evaluation mechanism to enhance their CLD provisions. Results found that students from the 18 schools (N=2247) their participation rate in CLD activities was increased even in the COVID era from 23% in 2021 to 47% in 2023, while the control group was tremendously decreased in the period. The finding suggested that an holistic approach of self-evaluation mechanism could effectively enhance school improvement strategically in CLD education. The research could provide useful insights to OECD countries in enhancing students' participation in CLD activities.

# ACE2023 Pre-Recorded Virtual Presentations

74898 | *Effects of Institutional Autonomy on Academic Freedom in Higher Education Institutions in Ghana*  
Bashiru Mohammed, Beijing Normal University, China

This study empirically examines the predictive relationship between institutional autonomy (IA) and academic freedom (AF) whilst controlling for the mediating effect of corporate governance (CG) amongst selected higher education institutions in Ghana. It also looks at the difference between females and males and their perceptions of the predictive relationship under the study. Using the explanatory research design, structured questionnaires were administered to 128 teaching and non-teaching staff of selected higher education institutions in Ghana. The Structured equation modeling (SEM) via Smart PLS 4.0 was used for analyzing and testing the hypotheses. The study finds that institutional autonomy is statistically significant in predicting academic freedom and corporate governance effectively mediates the predictive relationship between institutional autonomy and academic freedom. Additionally, there is a statistically significant difference between how different genders perceive the predictive relationship. In order to create a viable environment for academic work and ingenuity to thrive, the management of higher education institutions should allow autonomy in areas such as organisation, academics, finance and staffing in order to improve academic freedom. Additionally, policies that stifle academic productivity should be removed or revised as a corporate governance effort to mediate the relationship between institutional autonomy and academic freedom. Founded on the theories of the academic oligarchy model, the stakeholder theory and the gender schema theory the study elucidates how corporate governance significantly mediates the predictive relationship between institutional autonomy and academic freedom within the context of higher education within West Africa specifically Ghana.

75455 | *A Study on the Challenges and Transformation of Small Schools in Taiwan*  
Chun-Tzu Yang, National Tsing Hua University, Taiwan  
Kuo-Liang Yen, National Tsing Hua University, Taiwan

The proportion of small schools in Taiwan continues to increase, with public elementary schools with 12 or fewer classes reaching 55.3% in 2021. In addition to inherent factors such as geography, transportation, and culture, the impact of a declining birthrate has exacerbated the situation. In an era of diverse educational development, small schools face various challenges. How to overcome these challenges and turn the advantages and characteristics of small schools into strengths, nurturing students who meet the demands of the times, is an important issue. At present, the primary policy direction for small schools in Taiwan focuses on cost and student learning motivation, often leading to proposals for closures and mergers. However, considering the advantages and unique characteristics of small schools and transforming them into another possible development focus is a key consideration. This paper aims to explore the current challenges faced by small schools in Taiwan, which go beyond geographical, cultural, and declining birthrate-related issues. It also includes operational difficulties such as inadequate infrastructure, teaching equipment, low teacher retention rates, and lower student learning outcomes. The study focuses on 15 schools with fewer than 50 students and investigates the current state of small school transformation and development. Through the perspectives of small school education policy, school transformation models, and the application of learning technology, the paper discusses four aspects: 1) educational policy administration and financial support. 2) school-based curriculum features or the promotion of experimental education transformation. 3) systematic inter-school regional cooperation. 4) promotion of the application of learning technology. These aspects are proposed as references for the development and transformation of small schools."

73605 | *Exploration of Principalship Experiences on Inclusive Education Implementation in China*  
Sha Li, University Putra Malaysia, Malaysia  
Muhd Khaizer Omar, University Putra Malaysia, Malaysia

Over the past two decades, many countries have conducted research and taken steps to enhance principal leadership for more inclusive schools and ensuring every individual's access to equal educational opportunities. China, in particular, has carried out inclusive education practices based on its own context. However, there are lack of awareness among the educational stakeholders especially among the school administration offices on the importance to place inclusive education into practice. Worsen, the understanding and implementation of inclusive education at school has not achieved at its stated in policy paper. We employed a qualitative phenomenological approach by conducting semi-structured interviews with three respective informants who works in Chinese public school. The aim is to explore dilemmas and identify essential educational leadership quality traits for inclusive education implementation. The findings indicated that the infomants generally affirmed with the necessity of implementing inclusive education policy. Nevertheless, there are three major challenges based on thematic analysis findings: (a) Lack of understanding on the inclusive education concept, (b) no clear guidance on the implementation of the effective inclusive education policy, and (c) lack of experience on creating inclusive classroom environment. The discussion and implication of the findings were further discussed in this article. We believe that it is necessary to strengthen the principalship role in ensuring "No One Left Behind" global policy on inclusive education being rejuvenated and applied, hence, equal opportunities to education can be realistically implemented at layers of community of learners.

# ACE2023 Pre-Recorded Virtual Presentations

75213 | *An Exploration of Teacher Education Policies for Cultural Curriculum in Taiwan's Indigenous Schools*  
Su-Ting Yang, National Tsing Hua University, Taiwan

The Taiwan government has historically promoted indigenous cultural teacher training policies to cultivate teachers capable of inheriting indigenous culture. This study investigates the implementation status of the Indigenous cultural curriculum teacher training policy. It provides recommendations for adjustments to meet Indigenous cultural teachers' increasing professional development needs, including in-service training and pre-service education. Employing a semi-structured interview approach, this research focuses on indigenous experimental education schools at primary and secondary levels, purposively selecting nine schools and inviting school administrators and actual teachers responsible for teaching indigenous cultural courses to participate in the interviews, with a total of 18 interviewees. The study findings reveal that interviewees suggested improvements in cultural teachers' in-service training and professional development, focusing on the current learning mechanisms and content. Apart from proficiency in indigenous languages, the training should align more closely with the specific curriculum needs of indigenous cultural teachers. Additionally, for culturally oriented teachers who do not possess formal teaching credentials, priority should be given to providing opportunities for pre-service training through local teacher development programs. Furthermore, regarding future pre-service teacher education, the following recommendations were proposed: early exposure and increased frequency of field placements in indigenous communities to foster early familiarity with tribal cultures; enhancement of foundational educational expertise to facilitate the integration of traditional and cultural curriculum; improvement of language proficiency and expansion of indigenous cultural courses; and establishment of a qualified indigenous teacher certification system and promotion of local teacher training mechanisms.

72630 | *Culturally Responsive Leadership in Education*

Jill Tussey, Buena Vista University, United States  
Jessy Bibler, Buena Vista University, United States  
Michelle Metzger, Buena Vista University, United States  
Leslie Tussey, Xavier University of Louisiana, United States

Presenters will provide an overview of the importance of culturally responsive leadership in the K-12 system and higher education as well as leadership in both settings. According to Kruse and Gray (2018), instructional leaders "practice vision-inaction by evidencing an up-to-date knowledge and skill set, including different models of teaching, differentiation of instruction, the use of technology, and formative and summative assessment techniques" (p. 37). Further, high-quality instructional leaders stay committed to the path of continuous improvement and communication through evaluating, learning, modeling, observing, teaching, and reflecting (Jenkins, 2019; Sheninger, 2019). This presentation will address the areas of literacy, physical education, and math in connection to creating a culturally responsive learning environment. As instructors in higher education settings, it is important that we provide our students with resources and materials to create safe and welcoming environments for all learners. However, we also are aware of the importance of providing school leaders with resources and activities to embrace a culturally responsive environment. The presentation would be beneficial for educators in higher education as they support pre-service teachers or leaders. Attendees can expect to leave the session with activities and resources that can be utilized during professional development opportunities or classroom settings.

74833 | *The Influence of Transformational Leadership Among Academic Leaders and Readiness for Change Towards Educators' Workplace Commitment in Malaysian Technical University*

Afifah Yusuf, Universiti Malaysia Perlis, Malaysia  
Azhah Ismail, Universiti Sains Malaysia, Malaysia

Higher learning institutions aim to ensure continuity and feasibility in the academic sphere for the benefit of academic leaders, educators, and students. Local governments and international organisations recognise higher learning institutions as contributors to achieving long-term academic aspirations through competent top management and realistic alternatives to current concerns and difficulties. The Malaysian government's educational aspirations require top management to prioritise educators' potential and improve the learning environment. Academic leaders are accountable for providing the best academic culture, structure, and environment for educators, influencing other academic professionals, and aiding the Ministry of Education in raising the standard of education in Malaysia to a world-class system. The study focuses on determining the level of workplace commitment among Malaysian Technical Universities (MTUN) educators if their leaders adopt a transformational leadership style. Transformational leaders inspire educators to prioritise the institution's goals and have a significant impact on their workplace commitment. The study also examines the influence of readiness for change on the relationship between MTUN academic leaders' transformational leadership and MTUN educators' workplace commitment. The findings from these studies demonstrate that readiness for change mediates the relationship between transformational leadership and educators' affective commitment to change.

74766 | *Stakeholders' Assessment of Basic Science Programme Objectives in Southwestern-Nigeria*

Olufunmilola Yekinni, Lagos State University of Education, Nigeria

Helping to gain better understanding of the world puts science in a better position to influence positively, conditions for life on planet. Therefore, having the necessary science background and knowledge goes a long way to affect people's life positively. Hence, children are taught science early so as to develop the critical thinking skills necessary to sort through all the information that they will be bombarded with in their lives, and make intelligent decision about what to believe and how to value their world and environment. Basic science that is taught in schools has evolved as a process of gradual curriculum reform in science. This study carried out an assessment of the Stakeholders' rating of Basic Science Programme Objectives. Participants were ministry officials (33), principals of schools (89), year tutor/heads of department (166) and classroom teachers (269) selected by stratified random sampling techniques from Southwestern-Nigeria. The instrument engaged was Science Programme Objectives Rating Scale with reliability coefficient ( $r = 0.72$ ). Findings shows that Stakeholders rated the objectives to be very good ( $\bar{x} = 3.76$ ). However, the dynamic nature of Science necessitates continual assessment of the programme objectives from time to time.

# ACE2023 Pre-Recorded Virtual Presentations

## Educational Research, Development & Publishing

74251 | *Diversity and Interesting: International Students' Perception of Chinese Video Programs to Supplement Cultural Teaching*

Mengru Huang, Tianjin University, China

Tiewa Cao, Tianjin University, China

The growth of Chinese language education on a global scale has significantly aided the dissemination of Chinese culture. The primary venue for introducing Chinese culture to international students is the classroom. Therefore, when practicing classroom teaching of the Chinese language abroad, it is important to consider and plan how to introduce Chinese culture in a way that will make the recipients happy, simple, and quick to accept it. As media teaching tools, Chinese Video Programs benefit from having a large audience, a significant impact, and a long history of promoting Chinese culture. Through a questionnaire survey and semi-structured follow-up interviews with 140 international students at a university in Tianjin and statistical analysis of the data using SPSS software, it was found that diversity and fun are the greatest expectations of international students for the content of Chinese Video Programs. This study also found that rationalizing the length of supplemental instructional videos in the classroom and providing more incentives for learning are very helpful in promoting international students' Chinese culture learning.

75443 | *Literature Review of the Relationship Between Physical Fitness, Physical Activity, Cognitive Functioning and Academic Success*

Marko Sujica, Bussiness School Doba, Slovenia

The objective of this paper is to provide an extensive literature review of academic papers written in English about The Relationship Between Physical Fitness, Physical Activity, Cognitive Functioning and Academic Success. The research is showing that there are more and more benefits of physical fitness and physical activity on students cognitive (executive functions) and academic success, and it has been implemented into many different educational systems already. Usually, we can find many literature review where authors are comparing how either physical fitness or physical activity benefits cognitive or academic success, but approach in each culture or education system is quite different. The studies reviewed suggest that physical activity and physical fitness are positively affecting academic performance and cognitive development, but it has been rarely compared how all 4 items are affecting each other and more research should be done from that perspective. Physical fitness and physical activity is definitely proven to be beneficial for students thinking and solving academic exams, but there is further investigation to be done to see how more beneficial physical activity and physical fitness can be regarding cognitive functioning (executive functions) and academic success.

75814 | *Researcher Development at a Private Higher Education Institution: Perspectives of New Researchers*

Portia Webb, The Independent Institute of Education's Varsity College, South Africa

Private higher education institutions (PHEIs) have increasingly emphasized research output alongside their core teaching functions to enhance their credibility. However, empirical investigations into PHEIs and their research output are limited. Some scholars have criticized PHEI research output as insufficient. To address this challenge, the examined PHEI implemented initiatives to foster researcher development and reduce the workload of specific staff members, thereby creating capacity for improved research output. These new researchers are tasked with acquiring essential research-related skills and adjusting their attitudes towards research. This study aims to explore the perspectives of these 'new researchers' regarding Researcher Development within the studied PHEI. Utilizing a qualitative methodology with a phenomenological approach, this research investigates Researcher Development, focusing on the processes, experiences, and factors that contribute to the growth and professional maturation of those engaged in research activities. Phenomenology was chosen for its ability to capture human experiences and perceptions. In-depth semi-structured personal interviews were conducted with eight 'new researchers' from five different campuses of the PHEI. All interviews were conducted via MS Teams and lasted approximately one hour each. Data analysis followed Braun & Clark's (2013) six-step thematic analysis, guided by Evans' (2011) Componential Structure of Researcher Development, employing inductive, deductive, and axial coding. Academically, this study contributes to the limited knowledge base on PHEIs, their research output, and Researcher Development. Practically, the insights gained can help the PHEI identify areas necessitating strategic attention and leverage key themes to enhance their research initiatives.

73981 | *Education and Regional Economic Growth in Morocco: Spatial Modeling*

Ghizlane Ouahki, Mohamed V University, Morocco

Safa Baya, Cadi Ayyad University, Marrakesh, Morocco

Intuitively, the relationship between education and economic growth at the national level would be less complex than at the regional level. The economic development of a region should not be interpreted solely based on internal factors specific to that region, but also on factors from neighboring regions, as (closer) regions interact and the geographic distribution of wealth is not random. Thus, a region with high expenditures can stimulate economic activity in the neighboring region, as suggested by Rodrik (2011). In this regard, in recent years, Morocco has implemented several reforms and transformations in favor of regions, such as the new regional division as part of the advanced regionalization policy, as highlighted by JIRAOU and EL GRAINI (2020). In this context, we will attempt to study the effect of the advanced regionalization policy adopted by the Moroccan government on regional disparities in educational expenditures and economic growth. Specifically, we aim to explore the potential links between geographic location, educational policies, and economic growth in Morocco. For this purpose, spatial econometrics emerges as an appropriate tool, where spatial analysis, economics, and econometrics intersect, as proposed by Le Gallo (2002).

# ACE2023 Pre-Recorded Virtual Presentations

## Foreign Languages Education & Applied Linguistics

75788 | *Speaking the Language of Defence: Narratives of Doctoral Viva Examiners*  
Wee Chun Tan, Universiti Putra Malaysia, Malaysia

This paper delves into the discourse of oral defence, unveiling the perspectives of doctoral examiners regarding their expectations of the candidates' oral performance in the PhD viva. This investigation stems from the observation that candidates must adequately address questions posed by examiners to secure a favourable outcome in the oral examination. However, what constitutes a satisfactory viva performance is often undefined, let alone an excellent one. Through narrative inquiry, this study analysed the narratives of 12 experienced doctoral examiners across various disciplines at a Malaysian research university. The findings show that examiners expect candidates to speak the language of defence by manifesting confident, interactional behaviour, providing credible and convincing responses and displaying doctoralness. The discussion also includes the undesirable aspects of candidates' oral performance, along with the reasons underlying these expectations. The paper argues for explicitly articulating and sharing the expectations of doctoral viva examiners with candidates and examiners, aiming to enhance the preparation, process, and eventual outcome of the examination.

75909 | *Writing Conversations: Exploring How Metalinguistic Understanding Fosters Young ESL's Writing in Classrooms*  
Nur Najla Zainal Anuar, Rabdan Academy, United Arab Emirates

This study serves two purposes. Firstly, the study investigated and identified syntactic structures in young ESL writers' writing. Using a coding frame that coded several syntactic complexity key features at the sentential, clausal and phrasal levels, 92 ESL secondary students' essays at advanced and intermediate levels were manually analysed. Through writing conversations, the study also explored young ESL writers' metalinguistic understanding and how this affects their writing in classrooms. Using their essays as prompts, writing conversations comprising open-ended questions were conducted to elicit writers' metalinguistic understanding of writing. The first phase of the study, which involved manual linguistic analysis, revealed a consistent pattern among advanced writers. It also suggests that syntactic complexity of writing based solely on the presence of syntactic features may not determine essay quality and effectiveness. In the second phase of the study involving the writing conversations, it was evident that students do not rely on their metalinguistic understanding when writing; instead, students' perceptions of good writing mirrored their teachers', which are very much focused on accuracy. Furthermore, the conversations revealed no evidence of students or teachers discussing their linguistic choices in writing, especially in achieving the rhetorical goals. Although different studies suggest that explicit grammar knowledge may help improve accuracy, it should also be used in writing classrooms to foster discussion about writing that goes beyond language accuracy.

75146 | *Lexical Density in Academic Writing: Lexical Features and Learner Corpora Analysis in L2 Tertiary Students' Essays and Didactic Implications*  
Martina Lipková, Slovak University of Technology in Bratislava, Slovakia

Academic writing is crucial for communicating ideas among scientists, researchers and academics across various disciplines. It may be an arduous process for students when composing academic texts to meet the university requirements and academic discourse conventions. This research study investigates lexical features of the independent technical essays related to academic writing proficiency in students of Mechanical Engineering. Examining the score of lexical density compared to lexical diversity help educators understand the difficulties that students encounter when composing essays around topics concerning various technical study areas. Correlation between academic and specialty vocabulary in relation to lexical density was investigated to measure the extent to which the variables are related. Lexical density shows the measure of linguistic complexity of 42 university student's essays. Based on statistical analysis, a moderate correlation exists between the measure of the academic vocabulary used by the students and the lexical density. A low negative correlation between specialty words and lexical density was found. Syntactic and structural features of the texts are also significant indices of the academic writing proficiency. Computational tools and corpora-based analysis were used for statistical analysis. Outcomes of the research helped identify the students' lexical needs within academic and content-based discourse in tertiary education and have didactic implications in L2 academic writing courses in compliance with the conventions applied in the university academic context.

73775 | *The Impact of Student- Versus Teacher-Led Error Correction in the EFL Classroom: Validity and Reliability Considerations*  
Aric Denfield, Nichidai Sakuragaoka High School, Japan

Corrective Feedback (CF), defined by Lightbown and Spada (1999) as, 'Any indication to the learners that their use of the target language was incorrect', can be classified as being either teacher- or student-led. Empirical evidence suggests that student-led correction is more effective (Lyster and Ranta, 1997); however, it has been found that teacher-led correction is the most commonly used (Pawlack, 2014). The objective of these interventions is to establish the comparable efficacy and perceived effectiveness of the two forms of error correction with students in a Japanese senior high school and to ascertain their views on appropriate error correction (EC) methods. To do this, a series of tests were designed to gauge students' emerging grammatical accuracy in both oral and written communication. In order to gauge students' perceptions of the efficacy of the EC methods, a short survey was administered at the end of the testing stage. Before beginning the large-scale main trial, an external pilot study was conducted to validate the feasibility of the planned research. The current paper notes the considerations involved in the study, as well as the limitations of pilot studies. It then moves on to detail the modifications that were made to the instruments, the testing procedures and other data collection instruments, which increased the validity and reliability of the proposed quasi-experimental study. At the conclusion of the pilot, it was found that the full study could proceed.

# ACE2023 Pre-Recorded Virtual Presentations

74157 | *The Implication of Subconscious Approach in Stimulating the English Language Knowledge for Interpreting-majored Students*

Nhi Yen Ho, Nha Trang University, Vietnam

This study investigated the implication of the subconscious teaching approach in stimulating the English language knowledge for Interpreting-majored students. The researcher analyzed some relevant theories: Universal Grammar of Noam Chomsky and Stephen Krashen's Second Language Acquisition. After examining these theories, a proposed subconscious teaching approach was developed with the aim of improving the situation of lacking English knowledge in cases of some students in the Interpretation major. This study's method mostly follows the qualitative and quantitative approaches with 80 participants who are seniors from the Faculty of Foreign Languages, Nha Trang University, Vietnam. The study results revealed the whole picture of utilizing the subconscious approach in stimulating English language knowledge for students, and it could also contribute to other further studies improving thoroughly language skills in language teaching.

73146 | *An Analysis of Word Formation Processes in Select Philippine English Lexicon*

Shangrela Genon Sieras, Mindanao State University, Philippines

The increasing number of words and expressions added to the Philippine English lexicon shows the creativity and flexibility of Filipinos in building new meanings of words to fulfill their communication needs. This study examines the different word formation processes that led to the expansion of the Philippine English lexicon, and how Philippine English has incorporated unique Filipino linguistic features in its vocabulary, grammar, and discourse. Select words and phrases that are purposively sampled from a corpus of texts and speeches in social media were analyzed for their word formation processes and meanings. Findings show that Philippine English lexicon is constantly enriched by normal expansion through adaptation and extension of meaning, by a shift in form classes, the preservation of obsolete and archaic words, and forming new words by coinage through analogy, clipping, abbreviation, total innovations, and compounds. One crucial aspect in the process is that many of these words are introduced through social media, advertisements, and the internet. These words depict different fashion styles and trends in the Philippines and interesting insights into how our culture influences the formation of words. The study concludes that various word formation processes have contributed significantly to the array of the lexicon in our Philippine variety of English. Philippine English is dynamic and will continue to grow because speakers of the language are generally fond of inventing new, interesting, and vibrant words and expressions.

74731 | *Contextualization – an Effective Tool to Improve Efficient Listening Skills Among Adult ESL Learners*

Manas Moulic, Ramakrishna Mission Vivekananda Centenary College, Rahara, India

Somak Mondal, West Bengal State University, Barasat, India

Effective Listening is a must for the acquisition of any target language. But unfortunately, such a vital language skill is always neglected even in language classrooms. Listening as a language skill is not simply hearing of aural stimuli, but is an active process of receiving aural as well as visual stimuli attentively. It involves attention, reception, comprehension as well as retention of the message or intention of the speaker, followed by appropriate reaction on part of the listener. Now, reception of an aural or visual stimuli especially of English language may not be a difficult task; but the comprehension of the received message and intention of the speaker might be problematic, especially for the ESL / EFL learners, if the listener fails to realize the immediate context (situation), event and the speech act while listening. An empirical study conducted with 254 adult learners in three phases successfully proves that an effective comprehension of the received message (information and intention) can be possible if any listener could contextualize with the speech situation while listening. Thus, it became evident that appropriate contextualization as pre-listening activity, help in developing effective listening skills especially to ESL / EFL learners. The paper focuses on the importance of Listening as language skill and how proper contextualization help in effective listening.

73896 | *Advantages and Disadvantages of Artificial Intelligence (AI) in EFL Classrooms*

Lidija Elliott, Kwansai University, Japan

Undoubtedly, the conversation around artificial intelligence (AI) has recently intensified, fostered by the rapid development of technology. Learning institutions have joined in the debate, with teachers and learners on the frontline of this conversation. This study particularly explores the direct impact of AI applications such as chatbots (ChatGPT), personalized learning experiences, and predictive analytics on EFL classroom learning, outlining AI's advantages and disadvantages on foreign language learners and their teachers. It employs a qualitative approach to data collection and screening, utilizing surveys on a sample of students at university level. Evidently, from the study findings, AI can potentially improve learning, especially among foreign students in EFL classrooms. However, there is concern about AI inhibiting the development of learners' research and critical thinking skills. Largely, the findings recognize AI's value in EFL classrooms but appeal for caution from teachers in its application. This study offers valuable insights into AI's impact on EFL classrooms and offers possible changes that could help in its successful integration into EFL teaching practice.

# ACE2023 Pre-Recorded Virtual Presentations

74489 | *Using Incentive Autonomous Learning Strategies to Enhance EFL Chinese Undergraduate Learning Motivation and Speaking Performances: A Proposal*

Yang Yi, Universiti Malaysia Sabah, Malaysia

Asmaa AlSaqqaf, Universiti Malaysia Sabah, Malaysia

It is well known that Chinese EFL learners face considerable challenges in speaking English. Affective factors such as learning motivation could be a reason for this issue as motivation plays a vital role in language acquisition. Regrettably, Chinese EFL students lack the motivation to prioritize and improve their speaking as speaking is often neglected at the national examination level. On the other hand, autonomous learning emerges as a highly efficacious way to address the issue of oral English instruction. However, research that incorporates learning motivation, autonomous learning, speaking performances, and incentive strategies is very limited. Thus, this paper attempts to narrow this research gap by proposing incorporating autonomous learning through incentive strategies to improve EFL learners' learning motivation and speaking performances at a public university in China. Adopting an explanatory mixed-method research approach, the current study will use a quasi-experimental design with purposive sampling where two classes will serve as the experimental and control groups. The 14-week intervention will be implemented in the experimental group, while an in-situ approach will be implemented in the control group. A pretest and post-test data will be collected to check the participants' changes in speaking performances, while a longitudinal survey will be demonstrated to the students to examine their motivation levels before and after the intervention. It is hoped that the study would provide insights into the role of learning motivation and effective teaching strategies to enhance EFL learners' speaking skills.

74441 | *Feedback Practices, Dialogic Teaching, Adolescent-Writer Identity: A Pedagogic Trifle in the Writing Classroom*

Karthickeyen Govindaraj, Ministry of Education, Singapore

This paper, through the use of a thought-framework, explores the harmonising of feedback practices, dialogic teaching and writer-identity development in the Singapore writing classroom. In framing writing as a medium promoting coherence, organisation and logic-presentation (Barnes, 2016), this paper has a two-fold aim. First, it seeks to reflect on the use of PEEEL in writing instruction; an oft-used framework highlighting the connections between Point, Explanation, Evidence, Evaluation and Link. With PEEEL seen as a possible approach for Secondary and Pre-University English Language students to identify and present evaluation in argumentative writing, the second part of this paper surveys the use of informed feedback practices (Hattie and Timperley, 2007) when helping students develop understand PEEEL-led evaluation practices, leading to the birth of anadiplosis as an instructional strategy. A strategy born out of a figure of speech where the last word of a sentence is repeated as the first word of the following sentence (Walker, 2017), the anadiplosis approach is a way to enhance the quality of PEEEL-influenced argumentative writing, while nurturing a culture of critical thinking amongst students.

## Higher Education

75018 | *The Importance of Banks: The First Bank in the United States*

Cristina Vilaplana-Prieto, University of Murcia, Spain

In this teaching project I present an experience carried out with students of the Degree in Political Science at the University of Murcia (Spain) within the subject "Principles of Economics". Given the context in which it is taught, it is necessary to explain economic concepts reducing the mathematical part as much as possible. For this reason, I have used historical texts from the United States. Students participate in two rounds of a role play to help them understand the role of banks in facilitating economic growth through loans. Round 1 is conducted without a bank. After the first round, students read excerpts from Secretary of the Treasury Alexander Hamilton's 1790 report to Congress in which he proposes a national bank because the United States had few banks at the time. In this report, Hamilton made a case for how banks should work and dispelled rumors about banking in this report sent to Congress. Students then conduct Round 2 of the role play with a bank. After the round, students read excerpts from and summaries of the statute creating a national bank, Thomas Jefferson's opposition to the national bank (February 15, 1791, Letter to President George Washington), and Hamilton's rebuttal. This experience shows how historical events and developments were shaped by unique circumstances of time and place as well as broader historical contexts. Students realize the role of financial institutions as channelers of funds between savers and investors, as well as the relevance of the interest rate on deposits and loans.

75766 | *Systematic Review of Research on AI in Higher Education*

Gayathri Sivasubramanian, University of North Florida, United States

Artificial Intelligence is one of the most researched areas of interest in recent years. A significant amount of research has been scoped toward the use of artificial intelligence in education (AIED). In this research paper, much of the emphasis will be focused on artificial intelligence from a higher education perspective. The research in this area would conduct a thorough systematic review of the Web of Science (WoS) database and deeply analyze it to extract useful and relevant information, using text analysis and text mining software like Cite Space and Vos Viewer. By performing document co-citation analysis, a research pattern was identified that closely correlated with AI applications. The findings derived from this research paved the way to perform a thorough systematic review of AI applications in higher education using the Google Scholar database. It also gave me an opportunity to analyze relevant literature using Vos Viewer to extract useful and relevant information. The conclusion sheds light on the current research status of AI in higher education as well as AI applications in higher education. Furthermore, this paper has helped us to uncover potential research areas that can be used as a baseline to perform further research and derive state-of-art AI applications used in higher education.

# ACE2023 Pre-Recorded Virtual Presentations

73195 | *Higher Education: Quality Assurance Practices for Enhancing University Students' Soft Skills in Tanzania*

Samwel Credo, The University of Dodoma, Tanzania

Daniel Mngarah, The University of Dodoma, Tanzania

One of the missing ingredients in the graduating university students in different fields of specialization is their job-related soft skills. It is doubtful whether universities pay the deserved attention to the soft skills dimensions. This paper presents the findings of the study undertaken in two universities, one privately-owned and the other government-owned university. The objective of the study was to explore the mechanisms used by the university quality assurance departments (QADs) in monitoring students' attainment of the soft skills as an important consideration for meeting the labour market needs. The study adopted the qualitative research approach and involved a total of thirty (30) participants, including two (2) deans of students, twelve (12) janitors, four (4) course instructors, and twelve (12) students, using the interview, focus group discussions and documentary review methods to generate data. The results revealed that the quality assurance departments monitoring of the soft skills was done partially as those skills were expected to emerge from the teaching, learning, assessment and evaluation of academic processes in each semester. It was also revealed that soft skills, as well as other aspects of the affective domain required concerted efforts and commitment of diverse parties, particularly students themselves rather than perceiving it as the role of the QADs. The study makes a discussion of the findings and concludes that the soft skills lack a clear mechanism for determining their attainment, which risks their quality albeit efforts by the accrediting organs to have them monitored. The study offers some recommendations for improvement.

74136 | *Flexible Teaching in Rural Philippine Higher Education: Attitude and Anxiety of Educators as Predictors of Readiness*

Ma. Xerxa Doan Billones-Franco, Northern Iloilo State University, Philippines

This study investigates the level of readiness of educators towards shifting to flexible teaching in terms of attitude and levels of anxiety. The respondents were 179 educators from the seven campuses of Northern Iloilo State University, Philippines selected through proportional random sampling. This study employed the descriptive cross-sectional study using a survey research design. Data were gathered using a validated and reliability-tested researcher-made questionnaire. Results were analyzed using statistical tools such as Means, Standard Deviation, and T-test for Independent Samples, Analysis of Variance (ANOVA), and Pearson-r. The results of the study revealed that the educators' level of readiness towards flexible teaching in terms of attitude was neither positive nor negative as an entire group, however, as to academic rank, instructors have positive attitudes while college professors have negative attitudes toward flexible teaching. In terms of anxiety, educators have mild levels of anxiety. No significant differences were observed in terms of attitude when classified as to age, sex, civil status, length of teaching experience, and workload, however, a significant difference was observed in terms of anxiety when educators were classified as to sex. Furthermore, the educators' attitudes have a negative significant relationship to anxiety.

72045 | *Being Citizens in the Digital Era: An Empirical Study of Chinese University Students' Practice of Digital Citizenship*

Jing Yu, The Education University of Hong Kong, China

Koon Lin Wong, The Education University of Hong Kong, China

As a newly emerged concept, digital citizenship received extensive attention from researchers and was mainly investigated from the following aspects including exploring its meanings, developing reliable and valid instruments, and identifying impacting factors. However, it is detected that there is limited research focusing on researching how people behave as citizens in the online community. Employed quantitative research with purposive sampling method, this research aims to tackle this research gap by examining Chinese university students' practices of digital citizenship. As a result, 820 students were recruited according to gender, educational level, and educational background. The questionnaire data were analyzed by using Exploratory Factor Analysis (EFA) and then Confirmatory Factor Analysis (CFA). The research finding revealed that Chinese university students demonstrated high confidence in digital literacy skills, a strong sense of fulfilling civic responsibility as netizens, appropriate and ethical digital behaviors, respectful attitudes towards others' legal rights in the online community, responsible behaviors in protecting personal rights when surfing online, and relatively low passion for digital civic participation. This research theoretically contributed to current literature about digital citizenship practices, especially in a non-western context. Also, the findings of this research could help improve digital citizenship education when educators and policymakers examined gaps between teaching and learning of digital citizenship.

72604 | *Assessment of English Language Learning in a Time of Pandemic: Difficulties and Strategies from State Universities and Colleges' Language Educators*

Jimmylen Tonio, Catanduanes State University, Philippines

Romeleen Go-vela, Catanduanes State University, Philippines

Ma. Sofia Llaguno, Catanduanes State University, Philippines

This study investigated the assessment methods used by English Language Educators (ELEs) in State Universities and Colleges (SUCs) for Flexible Learning (FL) during the COVID-19 pandemic. Data were collected through individual semi-structured online interviews and follow-up email interviews with 11 ELEs from different SUCs. The study aimed to identify the challenges they faced in assessing language learning and explore the strategies employed to address these challenges. The study found that assessing students' learning outcomes in flexible learning has been challenging for educators due to limited access to online resources, intermittent internet connectivity, a high volume of submitted outputs, plagiarism, and limited contact with students. To assess students' progress, ELEs used open-ended questions, portfolios, and pre-recorded speeches. They also employed accessible platforms, quizzes, exams, discussion posts, and assignments to test student knowledge and comprehension. Participants used rubrics, provided feedback and questioning during online discussions, and explained the consequences of plagiarism. Moreover, ELEs employed flexible learning strategies such as creating online resources, providing extra support to struggling students, communicating with students regularly, and reducing the number of activities. To assess students' language needs and abilities, participants read and listened to their responses and employed tests in specific areas such as reading, writing, listening, or speaking. The findings of this study provide valuable insights for educators and administrators in addressing the challenges of flexible learning and improving language assessment practices in higher education during the COVID-19 pandemic.

# ACE2023 Pre-Recorded Virtual Presentations

## 74211 | *Understanding the Priorities and Support Needs of Carers in Higher Education: A Qualitative Longitudinal Study*

Jessica Runacres, Staffordshire University, United Kingdom

Daniel Herron, Staffordshire University, United Kingdom

Fiona Cust, Staffordshire University, United Kingdom

Student carers are those in higher education who have a commitment to providing unpaid support to a family member and/or friend who could not manage without their care, including, but not limited to, disability, illness, and/or physical and/or mental health issue(s). They are an under-represented and disadvantaged group in higher education and are four times more likely to drop out compared to those students without caring responsibilities. To address the challenges student carers face in accessing and succeeding in higher education, supports need to be developed. Much of the existing research focusses on student carer's health and wellbeing and their academic attainment, little research has explored student carer's broader experiences and priorities. This research aimed to explore the priorities and support needs of student carers to establish how they can be better supported to engage in higher education and maintain their caring responsibilities. Qualitative longitudinal research was undertaken in which student carers took part in two interviews approximately eight-weeks apart to support a better understanding of the wider factors which impact a student carer's experience (e.g., exams, coursework, contact hours, and the changing needs of the cared for individual). Data were analysed via inductive, semantic, (critical) realist reflexive thematic analysis. Themes were identified which gave insights into the development of supports for student carers, for example, the creation of student carer support plans, much like those created for students with disabilities. The findings can also be implemented to facilitate the planning and evaluation of future retention and recruitment strategies.

## 74759 | *Development of Instruction for Facilitating Students' Practical Critical Reflective Abilities*

Min Jou, National Taiwan Normal University, Taiwan

Due to the rapid development of science and technology, new technologies are constantly introduced into the automated production process, and technicians' work patterns are increasingly focusing on problem diagnosis/inspection/trouble-shooting and the development of new techniques for problem solving. In the era of technological innovation, technologies that industry needs are ever-changing. Therefore, how to make practitioners become competent developers of practical technologies to innovate continuously while working, and how to develop appropriate instructional strategies on practical innovations, become important research issues in technical education. In view of this, the study intends to develop critical reflective instructional strategies to promote students' abilities of practical technology development in mechanical diagnosis/inspection and problem solving. By improving the ability of reflection and critical thinking, the students can think of new methods, develop new techniques and solve practical problems when encountering challenges and difficulties in the practical environment. In order to promote the students' critical reflective behaviors, enhance their critical thinking ability, and further cultivate practical technology development talents to enhance the national competitiveness, this study plans to hold series of learning activities and integrate them with critical reflective learning materials and tools.

## 74581 | *Promotion of Strategic Learning from an Evaluation Approach Based on Student Empowerment: Case Applied in Higher Education*

Marisol Alvarez Cisternas, Universidad de Las Américas, Chile

Karen Nicole Jiménez Mena, Universidad de Las Américas, Chile

The work describes, from an evaluative approach based on student empowerment, the promotion of strategic learning of the students, all participants of the Diploma in Adult Education, offered by the University of the Americas (Chile) to its teachers, within the Development Training program Teacher. In this way, from this experience, the empowerment and active participation of students in the processes of evaluation of their learning achievements is promoted, producing a paradigmatic break in how the evaluation of student learning is conceived, promoting greater participation in it and commitment of the participants, catalyzing processes of critical reflection and strategic learning from the results of the evaluative situations. Method: The methodology considered a qualitative-descriptive methodological approach, with an intrinsic case study, for which the participation of 20 students of the Diploma in Adult Education was considered, considering the subject of methodological strategies, where the participants had the opportunity to work in a collaborative and participative way in their evaluation processes, considering a chair, an exercise and a final exam all applied to University Teaching. Among the aspects that can be highlighted, the students recognize that the indications and guidelines given by their teachers helped them to organize their work and activities, responding to the requirements of the evaluation tasks with more certainties than uncertainties, as well as the possibility of reviewing the results of the evaluative situations allowed them to carry out processes of critical reflection and verbalize their mistakes without fear of punishment in a collaborative manner with their peers.

## 75734 | *The Question of Culture in the Quest for Playful Higher Education*

Vinay Kumar, Nanyang Technological University, Singapore

In recent years, there has been a growing interest in playful teaching and learning in higher education. The contemporary quest of playful higher education, however, faces a number of obstacles and challenges. In this conceptual paper, using the Singapore context as an example, I discuss the relevance of one concept, labelled the 'culture in education', following the language of popular public discourse. The paper discusses the following questions: (1) What is meant by the 'culture in education' in Singapore and what are its implications for higher education? (2) What does the culture in higher education mean for the prospects for playful universities and higher education? Basically, I suggest that this concept, of the 'culture in education, is worth further consideration. Primarily, the proposal in this paper is centered around the idea that the project for playful teaching and learning in higher education in Singapore would benefit from first acknowledging the mainstream culture of the society, which also permeate universities and higher education system in Singapore, and attending to its ontological implications—that is, how the local culture in education in Singapore shapes higher education individual and institutional actors and stakeholders at a dispositional level. I then offer some thoughts on how, at this level, Singapore might begin to develop cultures of play by creating spaces for lower-stakes educational activities wherein teachers and students can feel relatively free to explore, experiment, understand, and ultimately cultivate what they might be interested in, what they value, and what matters to them.

# ACE2023 Pre-Recorded Virtual Presentations

## Language Development & Literacy

75375 | *Family Household Income and Children's English Proficiency in Malaysia: A Case Study*

Aini Syahira Jamaluddin, Albukhary International University, Malaysia

Fatihah Syahirah Nafrizam, Albukhary International University, Malaysia

Malaysia is a diverse country where the population covers people with different races that results in most Malaysian being able to be either bilingual or multilingual. Although the differences are a common factor that might be influencing their English proficiency, yet many of the research that has been done to study the correlation of races and English proficiency prove that the relationship between those two is there. Most people tend to ignore the influence of household income towards their English proficiency which results in less research being conducted. Thus, this study aims to investigate the parents' experiences between family household income and children's English proficiency in Malaysia. A few interviews had been conducted to obtain the qualitative data from Malaysians with different family household income. This study reveals that there is a relationship between family household income and their children's English proficiency in terms of the level of awareness on the importance of English, the practice of English in daily life and the resources provided by parents.

## Learning Experiences, Student Learning & Learner Diversity

75604 | *Lived Experiences of Student-Teachers During Practice Teaching Through Remote Teaching Modality*

Rizalina Gomez, Mindanao State University – Iligan Institute of Technology, Philippines

Monera Hairulla, Mindanao State University – Iligan Institute of Technology, Philippines

Corazon Biong, Mindanao State University – Iligan Institute of Technology, Philippines

Elezar Malicoban, Mindanao State University – Iligan Institute of Technology, Philippines

Rica Mae Guarin, Mindanao State University – Iligan Institute of Technology, Philippines

Faye Fajardo, Mindano State University – Iligan Institute of Technology, Philippines

This study presents the lived experiences of Pre-service Teachers during their internship program as practice teachers during the pandemic. This study includes a sample of Two Hundred (n=200) student interns who were deployed to different schools across the region. The springboard of this study is the systems approach utilizing the ADDIE model of instructional design. This study aims to describe the lived experiences of pre-service teachers during their practice teaching through remote teaching modality. This study utilized a qualitative research method through in-depth and focus group discussions. A narrative analysis was used to investigate the pre-service teachers' perspectives on remote-based teaching, their practices, challenges, and prospects. Secondary data of the research were collected through a careful analysis of respondents' narratives in the digital portfolio. Emergent themes were found using thematic analysis. The Pre-service Teachers discussed their expectations, both met and unmet, as well as the difficulties they encountered in managing their courses and delivering their lessons. They admitted that there was a strong support system from their cooperating teachers and supervising instructors. They continued to exert significant cognitive-social teaching influence. In conquering difficulties, they also demonstrated a growth mentality, resilience, integrity, and tenacity. Despite the challenges they encountered, they had accomplishments while completing their teaching internship. It is recommended that teacher education institutions implement targeted professional development programs emphasizing technology integration, virtual classroom management, and creative instructional approaches. Enhance mentorship and collaboration among educators that can help pre-service teachers navigate the challenges and gain confidence in teaching.

74953 | *Science Students' Perception of Learning Environment and Its Impact on Their Performance*

Oduola Oshodi, Lagos State University of Education, Nigeria

In majority of schools, primary, secondary or tertiary, Learning Environment is being presented to be made up of only the curricular activities, undermining the co-curricular and extra-curricular activities. Whereas, Learning Environment as classroom social climate is not made up of only the learning aspect of the school, but also the interaction between the students and their teachers, the teaching-learning activities of the classroom, as well as the laboratories. Hence, this study investigates some science students' perception of their learning environment and its impact on their performance. The population of the study is all science students of all Colleges of Education in three Southern States of Nigeria. Sample for the study include all 200 level students offering five chosen science subjects in a College of Education each from the three states. Learning Environment Inventory (LEI) and data obtained from school's record of students' performance were the instruments employed in the study. The finding shows that the more positive the students perceived their learning environment, the higher their performance. It is therefore recommended that learning environment instrument be used in assessing the relationship between teachers and students, as well as the environment of learning institutions.

75991 | *Reflections on Using a Monitoring System for Participating Students in Work-Based Learning (WBL) Aimed at Developing the Ability to Face Resilience*

Benjamaporn Jantorn, King Mongkut's University of Technology Thonburi, Thailand

The objective of this research is to 1) study the level of adaptability and resilience (AQ) and the level of work performance behavior of work-integrated learning (WBL) internship students in a college in Thailand, and 2) study the level of satisfaction in using the student internship monitoring system. The sample group used to study the internship monitoring system consists of 20 internship students and 20 supervising teachers from the host organizations. The tool used is a system for tracking and monitoring student internships, ability testing in facing and overcoming obstacles, behavior assessment of students, and satisfaction assessment. The statistical methods used for data analysis include basic statistics, percentage, mean, standard deviation, and dependent t-test. 1) The results of comparing the average scores before and after training showed that the average test scores for problem-solving and overcoming obstacles were higher after training, with a score of 143.05 & 125.50, and the average test scores for work behavior of the trainees were also higher after training, with a score of 109.10 & 76.15, which is statistically significant at the 0.01 level. And 2) The overall satisfaction level is at the highest level of satisfaction (4.64). The highest level of satisfaction is in the area of student monitoring and the second highest is in the area of guidance from advisors.

# ACE2023 Pre-Recorded Virtual Presentations

## 75298 | *Measuring the Effects of Student Satisfaction and the Engagement Level of Personalized Adaptive Learning Using an AI-Enabled Learning Pathway Tool*

Li Fern Tan, Temasek Polytechnic, Singapore  
Poh Nguk Lau, Temasek Polytechnic, Singapore  
Steven Ck Ng, Temasek Polytechnic, Singapore

Critical voices on the traditional "one-size-fits-all" education system, which assumes a uniform approach for all students, abound for not meeting individual student learning needs. Expecting teachers to cater to the diverse learning needs of each student is seen impractical and unrealistic. There is a growing demand for personalized student-centered education, aiming to accommodate the unique learning needs, abilities, and interests. Modern educational systems are incorporating innovations like Artificial Intelligence (AI), which not only personalize students' educational experiences but also make them adaptive. The concept of Personalized Adaptive Learning (PAL), which systematically tailor instruction to individual learners has gained prominence as a key educational reform effort in contemporary systems. As more teachers embrace PAL, it presents an opportunity to explore the relationship between student satisfaction and their level of engagement. In this study conducted in Singapore, PAL was implemented to 1061 students across three subjects – theory-based marketing, calculation-based statistics, and procedural airway bill calculation. The analysis is done by using factor analysis, Kruskal-Wallis test, Friedman test and Kendall tau correlation coefficient. The results revealed significant differences in the ratings of the three subjects between different constructs (lesson content, personalization and mobile devices) except for the system user interface construct. Moreover, there was a significant difference between all constructs among the students. Interestingly, the level of engagement is significant for three constructs: system user interface, lesson content and personalization. These findings provide insights into the factors that are likely significant antecedents for planning, designing and implementing PAL to enhance student satisfaction.

## 73805 | *Dental Student Perceptions on Clinic Supervision: A Qualitative Study*

Trinette Colina, University of the East Manila, Philippines

The integration of knowledge from basic sciences to clinical dentistry is an important learning process experienced by dentistry students. The entire process is facilitated by the faculty, officially recognized as the clinical supervisor. This research described student perceptions regarding clinical supervision in a Philippine dental school. This study used qualitative method through focused group discussions (FGDs). For each FGD, the target sample size is six to ten participants. Guide questions were prepared. A facilitator was requested to conduct the FGD proceedings. Audio recording was used and the minutes were transcribed to facilitate analysis and sent to the facilitator and participants after one week for validation. Five FGDs consisting of 6 students each were conducted to probe on students' perception on clinical supervision. In total, 30 students participated. Most were female junior students. First theme which arose from the student perceptions was the lack of time because of the high faculty-student ratio. A second theme which arose was that certain faculty traits affect students' perceptions on clinical supervision. Faculty characteristics which affected them positively were patience, approachability, and fairness. Faculty characteristic which affected them negatively was preferential treatment or favoritism that they see in the clinics. Students mentioned faculty traits of patience, approachability and fairness as positive traits in a clinical supervisor. On the other hand, students agreed that the general lack of time due to the faculty-student ratio, made it difficult for the faculty to allot sufficient attention to each student.

## 75724 | *Transition of Boys (Learners) with Language Acquisition Delay (Lad) to School*

Fatma James, Manukau Institute of Technology, New Zealand

Teachers play a pivotal role in providing smooth and successful transition to School from Early Childhood Education for boys with Language Acquisition Delay. Utilising talanoa/kōrero, the presenter shares a Master's Thesis finding, delving into the complexities and significance of language acquisition for boys transitioning to school and their associated experiences. The study that the researcher will present examines language acquisition among boys who don't fall under the umbrella of special education but encounter language delays as late-talking children. It sheds light on profound insights and comprehension regarding educators' pedagogical methodologies, beliefs, and guiding tenets during the transition process. The ensuing data disrupts the prevailing narrow perspective that confines Language Acquisition Delay to a mere disorder. Instead, it motions experts to share contemporary professional perspectives that foster the formulation of effective strategies and support for these learners. The study advocates for school readiness, caregiver involvement, collaborative efforts, and the crucial role of educators in the transition process, aligning these notions with existing scholarly discourse. A recommendation for further scrutiny and exploration within the New Zealand context concludes this persuasive academic exposition.

## 76627 | *University Student Perception Regarding the Poster Tour Method*

Gilberto Mejía Salazar, Autonomous University of Nayarit, Mexico  
Julio Cesar Cuauhtémoc Carrillo Beltrán, Autonomous University of Nayarit, Mexico

The following research is descriptive in nature and the proposed objective is to show the student's perception of the application of the poster tour method during the school semester. To obtain the sample we used the non-probabilistic sampling technique by convenience, this leads us to define a sample composed of 20 students who make up the group C2-6 of the Accounting career in a semi-school mode, of the Academic Unit of Accounting and Administration belonging to the Autonomous University of Nayarit. For the collection of information, a survey structured by closed type variables was used, without the participation of a pollster (self-administered), that is, automated by means of electronic mail, defining the survey as a data production technique. It should be noted that, within the results obtained, this type of method was effective for understanding, sharing and organizing information, having as main benefit the learning and teaching, demonstrating a greater participation by the student. Likewise, the student's perception is that it is an interactive and attractive method. Finally, the implementation of the poster tour is revealed as a valuable tool that successfully promotes benefits, increasing student confidence and interest in an effective way.

# ACE2023 Pre-Recorded Virtual Presentations

## 71749 | *Massive Open Online Course (MOOC): Instructor Student Rapport and Student Interests Among College Students of Karnataka*

Vishnu Achutha Menon, Kristu Jayanti College, India  
Aswathi Prasad, Clinical Psychologist (RCI Registered), India  
Limson Antony Puthur, Christ University, India  
K K Soman, Central University of Tamil Nadu, India

Massive Open Online Courses (MOOCs) have gained immense popularity in recent years, with the emergence of various platforms such as Coursera, Udacity, edX, etc. These platforms offer courses in various fields, ranging from computer science to humanities. The objective of the present study is to examine the association between student-instructor rapport and student interest while pursuing MOOCs. The sample comprised 383 college students pursuing undergraduate and postgraduate courses in Karnataka and employed two measures, namely the Instructor-Student Rapport Scale and the Student Interest Scale. The findings of the study suggested a significant positive relationship between instructor-student rapport and student interest. Personal connection, one dimension of instructor-student rapport was found to be a significant predictor of emotional interest in students; whereas enjoyable interaction, another dimension of instructor-student rapport, was demonstrated as a significant predictor of cognitive interest. The study throws light into the scope of utilizing instructor-student rapport in enhancing student interest, thereby enhancing the efficacy of MOOCs across the country.

## 76087 | *Comparing Students' Learning Preferences Through Cluster Analysis: Implications for Higher Education*

Chantima Pathamathamakul, King Mongkut's University of Technology Thonburi, Thailand  
Nuttavud Koomtong, King Mongkut's University of Technology Thonburi, Thailand  
Krittika Tanprasert, King Mongkut's University of Technology Thonburi, Thailand

In response to the disruptive changes within society and technology, higher education institutions need to transform their content-centric curricula into learning pathways that effectively equip students for the workforce. Adapting to the challenges posed by evolving learner dynamics is a crucial approach for institutions to enhance their responsiveness to such changes. This research aims to investigate the categorization of potential students based on their learning preferences, study self-efficacy, and learning motivation. Furthermore, the study seeks to compare the attributes of students across these different clusters. The participants were secondary high schools students from various school types in Thailand, using a multi-stage random sampling method for an online survey. Analyzing responses from 1137 students, a two-step cluster analysis identified three distinct clusters. The comparison of student characteristics among clusters showed significant differences according to the students' study self-efficacy, motivation, and learning preferences. Students in a cluster where the majority perceived their academic accomplishments to be at or above an average level exhibited significantly stronger preferences for both non-traditional and traditional study approaches, compared to the other clusters. The study also discussed how students' learning preferences and their interests in academic disciplines associated with their psychological attributes and perceived academic achievements. The distribution of cluster memberships holds significance for institutions, particularly in the context of communicating innovative learning approaches to potential students.

## 74798 | *Work Readiness Skills of Bachelor's in Technology and Livelihood Education (BTLEd) Graduating Students*

Rizza Gumbao, Iloilo State University of Fisheries Science and Technology, Philippines  
Bernie Bayogos, Iloilo State University of Fisheries Science and Technology, Philippines  
April Rose Buenafe, Iloilo State University of Fisheries Science and Technology, Philippines

This study aimed to find out the work readiness skills of Bachelor's in Technology and Livelihood education (BTLEd) graduating students. The objective of the study is to find out the demographic profile of the respondents, to identify the work readiness skills related to BTLEd graduating students as to sex and age. The researchers utilized as descriptive types of research and the respondents were purposively selected. The survey-questionnaire was validated and piloted before it was conducted at ISCOF, Tiwi, Barotac Nuevo, Iloilo. As a result, the demographic profile of the respondents as to age there were a bigger number from age groups 22-23, followed by age 20-21 and 24-25, female is more than the male respondents. The work readiness skills of both male and female were teaching skills. As to age 20-21 was entrepreneurial skills, 22-23 was teaching skills and 24-25 was industrial skills. There is a significant difference in teaching skills and entrepreneurial skills when respondents were grouped as to age.

## 76155 | *Lived Experiences on Student-Teacher Relationship in a Higher Education Institution During the COVID-19 Pandemic*

Sheila Marie Dela Peña, Philippine Normal University, Philippines  
Jose Ocampo, Philippine Normal University, Philippines  
Richard Monteverde, Philippine Normal University, Philippines

Due to the COVID-19 pandemic, students and instructors transitioned from face-to-face classes to online learning. Thus, the mode of communication and transmission of learning between students and teachers also differed. Although the importance of student-teacher relationships and interaction seems underappreciated in higher education, it is still vital to maintain students' engagement in studying. Using a phenomenological research design, the study aimed to describe how students and instructors build relationships in an online learning environment and identify the vital components of a student-teacher relationship that contribute to students' success in academic performance. Through purposive sampling, data gathered from virtual interviews with 34 participants underwent thematic analysis. Results show that there are two simultaneous phases in the student-teacher relationship process which are (1) the establishing phase and (2) the sustaining phase. Additionally, essential components of the student-teacher relationship that drive students' success are composed of (1) the teacher and the learner characteristics, (2) the platforms utilized, and, (3) the communication that transpires between the teacher and the learner. Moreover, future research may look into developing strategies that can enhance student-teacher relationships in higher education, specifically on how both parties can effectively relate with one another despite their differences in personality, mindset, and available resources.

# ACE2023 Pre-Recorded Virtual Presentations

74559 | *Theory to Practice: How Students and a Lecturer Incorporate Practical Student Projects at a South African University*  
Woudi Von Solms, University of Mpumalanga, South Africa

Lecturers have a responsibility to prepare students for employment in industry. Employment involves the practical application of theory, taught in a specific curriculum while studying, to different scenarios within the workplace. Unfortunately, curricula is often theory-based and students are not taught or given the opportunity to apply theory in different circumstances. In an effort to make a theory-based curriculum practical, the lecturer let third year Bachelor of Commerce marketing students open up a fictitious business on campus and apply all concepts in the marketing curriculum to their business. The fictitious business involved an interactive study hall where third year marketing students had to use games to help second year marketing students to study for a test. Before opening the fictitious business, marketing students created groups and used class time to apply theoretical concepts to the development of four businesses. This research project used action research in an effort to collaborate with students, understand and improve teaching methods and solve the problem of only teaching theory. Quantitative and qualitative data were collected through surveys and observation. The results highlighted students' learning habits; indicated that marketing students could practically apply the majority of concepts taught in theory and that games can be used as an effective motivator to study. This article highlights the process followed by the lecturer and how such projects can both benefit students and lecturers.

75221 | *Alternative Learning in the Philippines: A Study of Two Alternative Learning Systems for Out-of-School Youth*  
Rosselle Trishia Carbaja, Ateneo de Manila University, Philippines

Emerging in both Europe and America, alternative education movements catalyzed significant reforms in the education system, ultimately leading to the establishment of the Alternative Learning System (ALS). In the Philippines, ALS provides opportunities for the marginalized out-of-school youth (OSY). The aim of the study is to determine the OSYs' experiences, perspectives on ALS and to determine the impact of the program. Two ALS programs for out-of-school youth in Metro Manila are the focus of this study. These are non-government initiated institutions that cater to 19 to 25 year old out-of-school youths. A total of 20 in-depth interviews and 3 sessions of direct observation were conducted with current students and graduates of the programs to acquire their overall discernment of ALS. The participants of the study is comprised of 10 boys and 10 girls. These individuals have varied backgrounds, interests, and reasons for joining the respective programs. Using Nvivo coding, common themes identified from interviews and secondary sources were triangulated to acquire multiple views and to understand the meanings behind the statements. The results show that ALS offers opportunities and platforms for the marginalized sector to pursue their education despite the difficulties they experienced in life. However, their experiences while in the program were not all positive. Despite opening up opportunities for out-of-school youth, ALS programs are also structures that reinforce social inequalities. Such can be the paradox of educational programs, alternative or mainstream. Implications for ALS programs in the Philippines are discussed.

75865 | *Impact of One-Page Mind Maps on First-Year University Students in Improving Chemistry Learning*  
Khairul Amri Abdul Aziz, Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia  
Nazikussabah Zaharudin, Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia

Mind maps have grown in popularity as a visual learning tool in a variety of educational contexts due to its ability to promote comprehension and retention. This study looks at how using a one-page mind map to depict an entire chapter affects chemistry achievement among first-year degree students at Universiti Malaysia Pahang Al-Sultan Abdullah in Malaysia. A group of 50 university students (aged 18 to 19; 70% female) were asked to describe a chapter into a single-page mind map, highlighting the most essential ideas and linkages. The study used quantitative research methodologies, including pre- and post-tests and a control group. After completing the mind map, questions were given to test their understanding and critical thinking skills. The scores were given based on the correct answer. SPSS, a statistical software, was used to analyse the quantitative data, which included a t-test, ANOVAs, and correlations. The findings indicate that using a mind map to summarise a chapter's material is advantageous, with participants being able to answer critical thinking and problem-solving questions. Students who generated mind maps scored significantly higher than those in the control group (who did not build mind maps). These findings show that employing one-page mind maps as a teaching tool for encouraging in-depth comprehension and systematic information organisation is beneficial.

# ACE2023 Pre-Recorded Virtual Presentations

## Nurturing Creativity & Innovation: New, Innovative & Radical Education

73855 | *Creativity & Well-being: A Feasibility Study for a New Course at a Small Liberal Arts College in Japan*

Lee Friederich, Akita International University, Japan

Kathryn Cullen, University of Minnesota Twin Cities, United States

Naoko Araki, Akita International University, Japan

Yuko Taniguchi, University of Minnesota Rochester, United States

Naeko Naganuma, Akita International University, Japan

Joel Friederich, Akita International University, Japan

Considering the escalating mental health needs of college students during and after the COVID-19 pandemic as well as the stigma surrounding mental health in Japan, a team of educators and artists at two small universities in Tohoku joined forces with medical arts researchers at a large, Research 1 university in the United States to explore how creative activities such as visual arts, creative writing, and drama, as well as yoga, meditation, self-expression, and learning about positive psychology impact student well-being. Half of the 20 students enrolled in this intensive two-week course participated in our study, which implemented both quantitative and qualitative methods. Two Comprehensive Inventory of Thriving (CIT) surveys showed that total CIT scores increased significantly from pre- to post-course ( $p=0.04$ ). Interviews conducted following the class suggested the following eight themes: 1. Self-acceptance and self-compassion, 2. Self-expression: being seen and developing confidence, 3. Seeing others: developing empathy and community, 4. Redefining creativity, 5. Finding safe places, 6. Recognizing negativity bias and character strengths, 7. Reflecting on the past, and 8. Living in the present. Examining these themes to explain our quantitative results, we will also present two representative case studies, drawing from interviews, journal entries, and creative artifacts of one participant showing significant change as well as another showing little or no change after the course. Quantitative and qualitative data will be analyzed through the "active INgredients," from ArTs in hEalth (INNATE) Framework, identifying overarching and intersecting categories for important elements that contribute to well-being (Warran et al., 2022).

## Primary & Secondary Education

75737 | *Implementation of the 4C Learning Model in Improving 21st Century Skills in Abdurrah Boarding School Junior High School*

Susiana Tabrani, University of Abdurrah, Indonesia

Luluk Elvitaria, Universitas Abdurrah, Indonesia

Soraya Medina Ruza, Universitas Abdurrah, Indonesia

This research explores the implementation of the 4C Learning Model (Critical Thinking, Creative Thinking, Collaboration, and Communication) to improve 21st century skills at Abdurrah Boarding School located in Pekanbaru City, Riau Province, Indonesia, with 47 teachers and 236 students. This research uses qualitative methods with a case study approach. Data were collected through classroom observation, teacher and student interviews, and analysis of curriculum documents. This study adopted an experimental approach with a control group and an experimental group. The entire student body became the study population, and 100 students were randomly selected as a sample. The independent variable is the implementation of the 4C Learning Model, tested on the experimental group, while the control group still uses conventional learning methods. The dependent variable is students' 21st-century skills, measured through written tests, questionnaires, and classroom observation. Research instruments are tested for validity and reliability. Data was collected before and after the implementation of the 4C Learning Model, then analyzed using descriptive and inferential statistical methods. The results of the study are interpreted, and their implications for the development of students' 21st century skills are discussed. This research emphasizes the importance of a learning approach that is responsive to the demands of the 21st century. By integrating the 4C Model, schools can prepare students for global challenges with relevant skills. It is hoped that this research will provide guidance for other educational institutions in developing learning methods that advance 21st-century skills in the modern era.

## Professional Training, Development & Concerns in Education

75994 | *An Exploration of Mathematics Teachers' Reflections on the National Learning Camp Implementation*

Douglas Salazar, Mindanao State University, Philippines

Ronna Magto, Mindanao State University, Philippines

Christopher Magto, Mindanao State University, Philippines

This research aims to comprehend the reflections of five mathematics teachers who taught mathematics during the implementation of the National Learning Camp 2023. Reflection is defined in this study as the teachers' interpretation of their teaching experiences, practices and observations. It also identifies teacher participants' challenges when teaching mathematics for the entire program duration. The exploratory case study design from the qualitative research approach is used in the investigation. Purposive sampling is used to select teacher participants. Semi-structured focus group interviews are undertaken to elicit teacher participants' perspectives on their experiences, practices, and challenges in teaching mathematics during the camp. The interviewees include five mathematics teachers, two females and three males. To discover common themes and to analyze the data, a thematic content analysis was done on the content of interview transcripts. These teachers are interviewed in order to describe their teaching experiences and practices in areas such as the teaching plan, teaching method, goal setting, their strengths and weaknesses as teachers, and dealing with students in class. The researchers do a class observation to gather more information about their teaching practices in class. The findings show that the teachers succeeded in fulfilling their commitments as reflected in what they accomplished, as evidenced by the improvement in achievement test results, which contributed to the program's success, and that they identified the appropriate actions to be taken in response to the challenges encountered for improvement.

# ACE2023 Pre-Recorded Virtual Presentations

73328 | *An Investigation of Corporate Training Processes and Challenges in Early Childhood Education Centres*

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Tilagavati A/P Subramaniam, Quest International University, Malaysia

Early childhood education (ECE) is recognised as an important stage in the intellectual and psychological development of a young child's life. In response to this, the Malaysian ministry of education is working alongside the private sector to increase access to quality preschool education to ensure equitable outcomes are achieved. Thus, trained professionals are important for children's sustained growth and development. However, educators, still lack the necessary qualifications and competencies as training programmes are insufficient or irrelevant to equip them with the requisite knowledge and skills. A qualitative approach was selected to explore participants' perceptions and first-hand experiences regarding training processes and challenges faced. The target population for this study consisted of employers, human resources managers or the management team of private early childhood education centres (ECEC) in Ipoh, Perak. Interview samples were selected using the cell sampling purposive technique and the instrument used was structured interview questions. Online interviews were conducted using Google Forms and WhatsApp voice notes and messages. Deductive coding was applied to the data and investigator triangulation was employed to improve data credibility and validity. The findings indicated that ECE teachers lacked the required qualifications to deliver educational services properly. Next, ECE operators, managers, and training leaders consistently engaged in training but was unable to apply appropriate training processes. Lastly, there are multiple common challenges that ECECs face in planning and managing training programmes. The findings are significant to prompt ECECs to reconceptualise their approach to training to develop more effective training programmes.

73620 | *The Reflective Educators: A Preliminary Evaluation of Self-Narrative Research Encounter Group in Taiwan*

Yu-Jen Hsieh, Fu Jen Catholic University, Taiwan

Hui-Jen Lee, Fu Jen Catholic University, Taiwan

The Covid-19 pandemic has changed our daily behaviors and imposed many impacts. The increases of using technologies are one of big changes among education sectors. The arguments about the impacts of technology including artificial intelligence (AI) are ongoing. Many says that educators may be replaced by robots one day. However, can it become reality? It's important for educators to rethink and reflect their daily roles and practices. Self-narrative/ Autoethnography is one of ways to help educators reflect their teachings from past, now and future. The aim of this qualitative study is to evaluate and explore the experiences in the self-narrative research encounter group. Methods: Three educators in different education sectors were included as research participants. The written text messages from 2019-2023 were analyzed. Narrative analysis with thematic method was used to explore the participants' experience. Results: Five themes summed up from the encounter groups' experiences were identified. These included: (1) personal growth. (2) professional development in/on action. (3) stay true to self. (4) the ability to listen with empathy. (5) fascination for humanity values. Implications for practice: Although, there are some limitations. However, the results do highlight a new approach for doing the self-narrative research with encounter group. The narrative encounter group may be applied not only for research purpose but for help teachers in their own professional developments and improvement. Once we as the educators can stay true to ourselves, we may know how to act with the precious role of teacher which is the robots can never replace.

73450 | *Exploring the Teachers' Perceptions Towards the Development of National Curriculum: A Phenomenological Study*

Mohammad Rizky Satria, State University of Yogyakarta, Indonesia

The Indonesian national curriculum has undergone several changes in the last two decades. This study aims to reveal how teachers' perceptions towards this phenomenon. Using a qualitative study with the phenomenological method, this research examines teachers' experiences in dealing with the issue of curriculum change and how they construct the meaning for it. The informants of this study were 8 teachers from various levels and types of schools and regions. Data was collected through in-depth interview techniques, credibility test by increasing persistence and triangulation, dependency test by auditing the entire research process, and data analysis using an interactive model which was entirely carried out in October-December 2022. The results of this study indicate that: First, all informants faced the same phenomenon, but had different experiences due to differences in the level and type of their school; Second, diverse experiences produce different meanings, where school conditions and needs, external support, and perspectives on challenges influence the teacher's adaptation process in dealing with the change.

74841 | *Studying of the Teacher's Ability to the Learner-Centered Pedagogy*

Anna Toom, Touro University, United States

In modern education, under the influence of humanistic psychology originated by A. Maslow and C. Rogers, the learner-centered pedagogy is widely developing. This approach imposes certain requirements on the competence of educators. One of such competencies is the ability to see the learning task through the child's eyes which contributes to a productive dialogue and the disclosure of the learner's full potential. In our study, this ability was examined in graduate students who currently are schoolteachers. 270 teachers participated in the experiment. They observed children in their classrooms while children were solving various problems: in reading, writing, math, and drawing. Then, teachers answered the following question in writing: "What sequence of actions would the child you were observing have to perform in order to solve his/her problem correctly?" Their answers can be divided into four categories: a) sociocentric, if they correctly identified the necessary sequence of the child's actions; b) egocentric, if they rather determined the sequence of their own actions at the time of observing the child; c) mixed, i.e., including both of the above categories; d) others, in which their answers were replaced by irrelevant reasoning. Results showed that 36.7% of the schoolteachers failed with the experimental task ("b" and "d" categories). The study author's further efforts will be directed to improving her Child Development and Learning course's curriculum – implementing various assignments into it based on the ability to see the learning tasks through children's eyes. This training will develop the teachers' skills for learner-centered pedagogy.

# ACE2023 Pre-Recorded Virtual Presentations

## Teaching Experiences, Pedagogy, Practice & Praxis

73876 | *Beyond Words: Non Verbal Communication in the Undergraduate Medical Education Classroom*

Sara Khan, Shifa Tameer-e-Millat University, Pakistan

Abel Jacobus Pienaar, Shifa Tameer-e-Millat University, Pakistan

Gideon Victor, Shifa Tameer-e-Millat University, Pakistan

Background: One of the greatest gifts bestowed upon humanity by the divine is the ability to communicate. This encompasses the expression of thoughts, emotions, information, abilities, and ideas through both verbal and nonverbal means. Nonverbal communication accounts for over 65% of all communication and is the focus of this research project, which aims to explore and assess the various aspects of nonverbal communication that influence student learning. Methodology: An exploratory sequential mixed methods research design was used among medical and dental students of a private medical university. Qualitative phase employed four focused group discussions to explore students' experience regarding nonverbal communication of their teachers. Data was then analyzed through open thematic analysis. Quantitative phase was employed to collect data from 242 medical and dental students using a self-rated nonverbal communication questionnaire. The data were analyzed using SPSS 25. Permission was taken from the institutional review board (IRB) and informed consent was obtained. Results: A main theme, contextual nonverbal medical education practice, and two subthemes, namely nonverbal competencies in medical education possessing knowledge, skills, and attitudes relevant categories and nonverbal learning facilitation actions, emerged from qualitative data. The mean score of chronemics was 4.66 and vocalics was 4.33, whereas proxemics and oculosics were 4.00 respectively. Comparison between gender and program was statistically insignificant ( $P$ -Value > 0.05). Conclusion: This study revealed that educators' nonverbal communication, is utilized decorously, is fundamental for students' learning facilitation, and can contribute effectively to learning communication strategy in the medical education classroom.

75331 | *Considering Pedagogical Strategies for Countering Distraction and Its Sources*

John Guy Perrem, Muroran Institute of Technology, Japan

This research-based presentation reports on the issue of student distraction and disruption in online versus physical classrooms at university level. It is hoped that it will provide useful insights to teachers based on actual student feedback. The research was conducted by using a Student Disruption and Distraction (SDD) Questionnaire which garnered responses from 50 students across two undergraduate General English Seminar (GES) classes. The SDD Questionnaire examined the intensity of frequency for both disruption and distraction as well as the main causes for each. In this way the study draws a distinction between perceptions of external disturbance factors and perceptions of self-distraction. The content of the SDD questions was derived from synthesising discussions in the literature regarding technology, the educational consequences of distraction in class and common external disturbance factors. Frequency and intensity questions were integrated throughout the questionnaire to allow for an insight into how often and to what extent disruption and distraction were occurring. The SDD response data was processed and analyzed to construct charts to represent categorical and percentage data. The results indicate that online lessons present disturbance problems arising from partner unpreparedness, students becoming distracted by mobile phones/personal devices and gaming. Results regarding the physical classroom lessons showed that students were less distracted but more likely to being disturbed by proximate factors, such as other students arriving late or talking. The presentation will also offer some pedagogic strategies which are targeted to resolve the main problems in online and physical classroom environments.

75411 | *Educational Response to Digital Learning, on the Example of English Language Vocabulary Learning Problem*

Selma Slezovic Mehovic, University in Belgrade, Serbia

Adisa Dzankovic, University of Belgrade, Serbia

The aim of this study is to explore how digital learning can affect students' education. The basic idea was to investigate in which way digital and interactive content influence the quality of knowledge and language skills of students. Starting from the hypothesis that the range of learned vocabulary can be greater with an interactive whiteboard, in the 2019/2020 school year we conducted research among elementary school students. The research was conducted in the Educational Center "Logos" in Novi Pazar. It included a total of 80 students in the seventh and eighth grades of elementary school, 40 students in 4 control groups, and 40 students in 4 experimental groups. The analysis of the results of this research provided a methodological potential for application in the teaching of English as a foreign language. Also, the study shows that digital learning can be used as a process of social learning which is very efficient for time-saving. Teachers have the opportunity to personalize learning in accordance with the needs of the students, and learning can be done remotely, if necessary. Keywords: education, digital learning, vocabulary, interactive media.

# ACE2023 Pre-Recorded Virtual Presentations

75193 | *An Initial Study of Integrating Bilingual and Science Instructional Modules for Elementary Science Teacher Preparation*

Ying-Feng Wang, National Taichung University of Education, Taiwan

The study aimed to develop integrated English and Mandarin instructional modules for elementary science teacher preparation. The instructor played a researcher's role to implement action research during the course of science teaching and learning. Fifty university elementary pre-service students taking the three-semester hour course during the two semesters participated in the study. The instructional modules with the approaches of multi-modalities were developed by the researcher, then consulted with five science education experts, and modified to apply in the science teaching and learning course. Integrating English and science concepts to guide the pre-service students to learn by doing inquiry-based science activities, such as identifying plant characteristics, insect taxonomy, and a variety of science experiments. Data were collected from classroom observation, questionnaires, student assignments, and feedback, most of the pre-service students put their hearts into operating science activities and express their thoughts in bilingual ways through the integrated instructional modules. Some of them wrote interesting poems, science stories and developed science lesson plans across several disciplines, including science, Mandarin, English, art, and mathematics. On the other hand, some of the pre-service students felt difficulties with learning science concepts and theories in English. Multi-modalities were effective to engage their understanding of learning science. Two-thirds of pre-service students were interested in designing science activities in English, however, they were less self-confident to express themselves in bilingual ways. In order to engage the elementary pre-service students using English as the medium of instruction, content, and language-integrated learning skills, and learning confidence needed to be enhanced.

73674 | *Literature Review of Teachers' Perspective of Blended Learning Model in Secondary and Higher Institutions*

Vesna Lavric, DOBA Business School, China

The objective of this paper is to provide an extensive literature review of academic papers written in English about teachers' perspective of Blended learning model in secondary and higher-level educational institutions. The research clearly shows us, that there are many factors that influence how the implementation of the Blended learning model is accepted by different educational institutions and in many cases, it comes right down to culture. This is also the reason why, the implementation tactics and acceptance can't just be copied from one country to another, or from one culture to another, so the approach changes each time. There are differences between implementing the model into different levels of education, for example secondary education or higher education and there are also differences between the perceived perspective of Blended learning model on each educational level. The results show us that most of the research done in this area has been connected with students' satisfaction and mostly in higher education institutions. There are some papers that have been researching secondary education level but even these papers mostly focus on students' perspective and very rarely on teachers' perspective. These results imply that more research needs to be done from teachers' perspective and in secondary level institutions. Blended learning is definitely staying here for good and it has brought a lot of success to education but we can also see that more work and research needs to be done to achieve a quality education and satisfaction on all sides.

75144 | *Using 4 Case Studies to Illustrate the Teacher's Pedagogical Content Knowledge of Music Education in Hong Kong*

Wing Yin Lam, The Hong Kong University of Science and Technology, Hong Kong

Rhoda Wang, The University of Hong Kong, Hong Kong

Music education has been integrated into the curriculum in Hong Kong for over 20 years. After the Learning to Learn curriculum reform in 2001, it is recognized as a key subject to foster student holistic development, especially for aesthetic skill training and moral growth. This research study is an exploration of music teaching practices in Hong Kong primary school context. Four music teachers of diverse backgrounds were recruited for conducting in-depth interviews during the pandemic times. By adopting the idea of Shulman's pedagogical content knowledge (PCK) and integrating five commonly-used music instructional methods, such as Kodaly, Orff, Suzuki, Gordon, and Dalcrozes's approaches, a novel music pedagogical framework was created for coding the music teaching practices and no previous research has been done in this perspective. Based on the four case studies, preliminary results suggested that music teachers in private international schools were likely to exhibit greater variability in their pedagogical approaches to music instruction compared to music teachers in public-aided schools. This finding revealed that music teachers in private international schools tended to employ more dynamic and constructive teaching methods, which was paramount to flourishing student learning. Additionally, the modeling, guiding, and training approach was identified as a grounded teaching method for music education regardless of different types of schools. Furthermore, a supportive learning environment and parental involvement were prerequisites for effective music education and all teachers considered these factors. Other implications were highlighted for framework development.

# ACE2023 Pre-Recorded Virtual Presentations

## 75862 | *Secondary School Teachers' Experiences of Using Gender and Inclusive Pedagogies Towards Bringing Changes in the Classrooms and Schools*

Md. Khairul Islam, University of Dhaka, Bangladesh  
Mohammad Ali Zinnah, University of Dhaka, Bangladesh  
M Wahiduzzaman, University of Dhaka, Bangladesh  
Mohammad Tariq Ahsan, University of Dhaka, Bangladesh  
Md. Ahsan Habib, University of Dhaka, Bangladesh  
Md. Saiful Malak, University of Dhaka, Bangladesh  
Md. Shahadat Hossain Khan, Islamic University of Technology, Bangladesh  
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Md. Abdus Salam, University of Dhaka, Bangladesh  
Diba Hossain, University of Dhaka, Bangladesh

Globally, attention to gender and inclusive pedagogies has grown in order to advance high-quality education. In Bangladesh, Nepal, Bhutan, Vietnam, and Timor-Leste, a cross-cultural study was done to evaluate the effects of a co-designed teacher professional development program called Gender and Inclusive Pedagogy (GIP) on secondary school students' participation and academic accomplishment throughout the pandemic and beyond. GIP intervention was experimented in 60 secondary schools in five partner countries. This paper particularly presents the findings from the analysis of data collected from twenty (20) subject teachers from twenty experimental schools in Bangladesh aiming to explore the real-world experiences of teachers to use gender and inclusive pedagogies in the classrooms and schools. Semi-structured interviews have been conducted to collect data and thematic technique of qualitative data analysis has been used. Findings suggest that majority of the teachers experienced changes in terms of their own understanding and attitudes about gender and inclusive pedagogies (GIP), students' behavior towards their peers, students' voice and active participation in the classrooms and schools, students' assessment procedures, practices of GIP by fellow colleagues, engagement and role of school management committee (SMC), parental involvement and influence in the schools, school environment, involvement of local education officers in school activities, and role of head teachers. Findings also suggest that despite having much positive experience of the teachers, they experienced challenges in school contexts over the period of time towards GIP implementation. Findings have implications for teachers' preparedness and practices of GIP towards achieving quality education as recommend in SDGs.

## 74051 | *A Transdisciplinary Team-teaching Approach to Community-based Undergraduate Capstone Projects in a Residential College in Singapore*

Lavanya Balachandran, National University of Singapore, Singapore  
Angie Tan, National University of Singapore, Singapore

This paper examines the impact of team-teaching pedagogies in the context of a capstone course in a residential college based in a Singapore university. The capstone experience in this college is part of the general education curriculum offered to resident undergraduates. Designed to provide an opportunity for transdisciplinary research collaboration, the capstone requires the multidisciplinary student research team to work closely with a community partner on a local need or problem under the supervision of college faculty. Drawing on the authors' experiences of co-supervising two disparate capstone projects centred on disability accessibility in Singapore, this paper examines the implications of team-teaching for both teacher development and student learning. Despite being resource-intensive, prior studies highlight team-teaching as a means of fostering accountability and professional development for teachers involved. The synergistic nature of team-teaching allows for a range of perspectives, provides opportunities for exchange, challenges traditional teaching practices and introduces alternative pedagogical approaches. This reflexive exercise extends earlier studies of team-teaching by examining how the authors negotiate and integrate their expertise with one's strengths in conceptual and research knowledge, and the other's, in familiarity with the community. Team-teaching pedagogies here are applied in a transdisciplinary research context wherein students gain a comprehensive understanding of a topic, and develop research skills. This paper contributes to the ongoing discourse on innovative pedagogical practices and suggests that team-teaching in a research-based course not only enhances the supervision experience but also empowers students to become critical thinkers who take ownership of their learning and personal growth.

## 73129 | *Using Artificial Intelligence Tools in Product Design Course*

Tee Hui Teo, Singapore University of Technology and Design (SUTD), Singapore  
Maoyang Xiang, Singapore University of Technology and Design (SUTD), Singapore  
Fan Ouyang, Zhejiang University, China

The utilization of artificial intelligence (AI) tools in product design courses has gained significant prominence in recent years. A preliminary survey conducted at the onset of the design course revealed that 70% of students expressed their disagreement with the idea of banning AI tools from the curriculum, and 27.5% remained neutral. Subsequently, a follow-up survey indicated that 66% of students extensively adopted ChatGPT or equivalent tools, while 34% extensively utilized Midjourney or equivalent tools in their design projects. These findings highlight the undeniable importance of AI tools in the course, focusing instead on effective adoption strategies. This approach harnesses AI algorithms and techniques to enhance the design process, optimize product performance, and facilitate innovative solutions. This paper explores the integration of AI tools in product design education and investigates their impact on student learning outcomes. It discusses the numerous benefits associated with incorporating AI into the curriculum, such as enabling advanced simulations, automating design processes, and fostering creativity. Additionally, the paper addresses the challenges that arise when implementing AI tools in the classroom, emphasizing the need for specialized resources and technical expertise. Moreover, the paper presents a range of instructional strategies and case studies that illustrate successful applications of AI in product design courses. By incorporating AI tools, educators can provide students with invaluable hands-on experience, equipping them to meet the demands of the ever-evolving design industry. This abstract underscores the significance of AI in product design education and offers insights into its potential to revolutionize the field.

# ACE2023 Pre-Recorded Virtual Presentations

73052 | *Using First Principles Concept in Engineering Course Delivery*  
Tee Hui Teo, Singapore University of Technology and Design (SUTD), Singapore  
Fan Ouyang, Zhejiang University, China

The integration of first principles concepts in engineering education has proven to be a valuable approach in enhancing student learning and comprehension. By emphasizing fundamental principles and their practical applications, this teaching methodology equips students with a deeper understanding of the subject matter and fosters critical thinking skills. This work explores the benefits and challenges of incorporating first principles in engineering course delivery. It highlights various instructional strategies and tools that can be employed to effectively integrate first principles into the curriculum. Additionally, the paper discusses the potential areas for future research and pedagogical development in leveraging first principles to enhance engineering education. Through this exploration, educators can gain valuable insights and guidance on leveraging first principles concepts for optimal student learning outcomes in engineering courses. The survey found that 81% of learners prefer to have a focus on a few basic principles in a specific course to learn better. When they were given multiple choices, the survey showed that 64% prefer physics-based principles, 42% prefer technology-based principles, and 28% prefer mathematics-based principles. These findings indicate the preferences of students and highlight the importance of tailoring instructional approaches to incorporate the desired first principles.

76096 | *Analysis of Factors Influencing Secondary Teachers' Satisfaction with Teaching*  
Joonmo Yun, Jeju National University, South Korea  
Hyunjeong Lee, Jeju National University, South Korea  
Jihye Jung, Jeju National University, South Korea  
Donghyub Kang, Jeju National University, South Korea  
Jinmyung Yang, Jeju National University, South Korea  
Hogeon Goh, Jeju National University, South Korea

The satisfaction level of teachers in Korea is continuously declining. Although satisfaction with the teaching job has a great influence on achievement of educational goals, school innovation, and class change, research on the satisfaction of teaching job is still lacking. In this study, using the 9th-year panel data of Gyeonggi Education Panel Study (GEPS) in Korea, we tried to confirm the factors affecting satisfaction with the teaching profession through hierarchical regression analysis. As a result of the analysis, it was found that teacher's enthusiasm, teacher efficacy, degree of training help (class), degree of training help (individual), and principal's leadership had an effect on teaching job satisfaction. On the other hand, the degree of training help (individual) showed a negative effect, and all other factors except this showed a positive effect. Lastly, among the factors that have a positive impact, the enthusiasm of teachers, the degree of help given to training (classes), and ways to improve school principals' leadership were discussed, focusing on the practice of the three main actors in education administration: the state, city and provincial offices of education, and schools.

76101 | *Investigating Relationship of Non-cognitive Factors as Determinants of Academic Achievement*  
Joonmo Yun, Jeju National University, South Korea  
Eunchong Kim, Jeju National University, South Korea  
Jaesang Kim, Jeju National University, South Korea  
Kyeongjoo Yoon, Jeju National University, South Korea  
HyeokJon Kang, Jeju National University, South Korea

Due to the polarization of education and learning deficits caused by COVID-19, the percentage of children with learning disabilities is increasing. Although many studies on academic achievement have been conducted to solve this problem, comprehensive studies on the relationship between non-cognitive factors are lacking. In this context, this study analyzed the effects of non-cognitive factors, especially affective factors and environmental factors, that affect students' academic achievement by using panel data from the 9th year of the Gyeonggi Education Panel Study (GEPS) of South Korea. Then, according to the hypothesis that affective factors influence academic achievement, a total of two stages of multiple regression analysis was used to explore factors that influence students' academic achievement. As a result of the analysis, the defining factor that had the greatest impact on academic achievement was found to be the self-efficacy in academic areas. The environmental factor that had the greatest influence on self-efficacy in academic areas was found to be the relationship between teachers and students. These results indicate that in order to enhance students' academic achievement, it is necessary to promote self-efficacy in academic areas through the development of a positive teacher-student relationship.

76175 | *Learning Technologies for Today and Tomorrow: A Digital Collection of Insights and Tips for Academics*  
Janine Lewis, Tshwane University of Technology, South Africa  
Maritha Pritchard, University of Johannesburg, South Africa  
Maud Blose, University of Johannesburg, South Africa  
Gitanjali Mistri, Durban University of Technology, South Africa  
Frelet De Villiers, Free State University, South Africa  
Veronique Joubert, Tshwane University of Technology, South Africa

This virtual presentation offers a participatory-online experience. In this collection of digital diaries by seven multi-disciplinary academics and instructional designers from five different universities in South Africa, each share their personal stories about their teaching and learning approaches when using digital technologies. Utilising the website builder, MS Sway, the group collaborates to create an interactive, multi-media digital artefact to showcase the functionality and experience of different Apps or Software used to enhance student engagement in the e-Learning environment. The digital artefact has a hyperlink to the repository of knowledge that will be shared with all delegates engaging with the presentation. Each delegate can explore the website at will during or after the presentation and save it as a reference to share or revisit at another time. The lessons learnt being told in the artefact are written in a manner for those versed in digital or hybrid learning or those who are new to using educational technologies in the (a)synchronous classroom spaces. It is designed with the intention of how we as reflective practitioners should remain open to explore new approaches to hone skills and reflect, supporting a process of life-long learning. We hope that each multi-media story will inspire others to fearlessly use educational technologies to actively engage students, even if they have not done so before. This is merely a start to the recipes of reflective practice; other contributions will be welcomed in time. Making this a sought-after resource for educators.

# ACE2023 Pre-Recorded Virtual Presentations

73932 | *Flipped Learning Experience to Develop Research Skills and Scientific Argumentation in Students of a Teaching English as a Foreign Language Program*

Andrea Bernal Hernández, Corporación Universitaria Minuto de Dios, Colombia

Scientific argumentation competencies in English involve writing and delivering an oral presentation with a scientific structure and research competencies are about the knowledge, skills and attitudes necessary to carry out an investigation in the field of education and pedagogy. Both are essential for future teachers, but students of a bachelor in English-teaching as a foreign language struggle to acquire both. This sequential mixed action research focuses on analyzing the effect of using a flipped learning environment for the development of these competencies in three research courses of a Bachelor of foreign languages teaching with emphasis on English in Bogotá, Colombia. In the qualitative phase, the flipped learning experience was recorded through field notes and artifacts and analyzed based on emerging, a priori and axial coding. In the quantitative phase research skills are measured through assessment rubrics in a quasi-experimental design. The sample consists of 120 students. This presentation mainly reports the results on the qualitative phase, students' research outcomes, attitudes, and perceptions. After the experimental treatment, learners show evidence of research competencies that were unknown to them, such as the skill of writing drafts of their theoretical frameworks and the methodological designs of their initial research proposals. It is concluded that students practice research competences supported on the flipped learning experience. Furthermore, the experimental treatment allowed students to be aware of the reasons why doing research matters as part of their teacher training process, their identities as English teachers, their social responsibility and professional development.

72132 | *Independent Learning: Analysis of the Academic Effect of Considering the Principles of Independent Learning (IL) in Teaching Filipino 9*

Arvin Jasper Villanueva, De La Salle Santiago Zobel School, Philippines

Gio Paolo Bautista, De La Salle Santiago Zobel School, Philippines

Steward Amon, De La Salle Santiago Zobel School, Philippines

Independent learning is an essential skill that improves students' metacognitive skills and learning. This study assessed the effectiveness of Independent Learning (IL) as a Tier 1 Intervention in improving the academic performance of Grade 9 students in Filipino subject and explore the significance of IL and its principles on the learning and experience of Grade 9 students. The study used IL-based principles such as metacognition, crafting one's learning targets, use of resources, self-assessment, identifying the achievement of learning targets, and linking it to student decision-making and interaction with others. A PDSA model was used to design the action research, and purposeful sampling determined the cycle data analyzed. The researchers used a t-test to determine the statistical implication of the data (pretest and post-test) from a sample population of ten Grade 9 sections. After statistical analysis, a p-value of 6.78149e-21 was obtained, indicating a significant difference between the pretest and post-test data, leading to the acceptance of the alternative hypothesis. To further validate the use of IL principles, students' reflections on their Performance Task (PT) and related tasks were analyzed, revealing a greater understanding of the lesson through the designed activities and/or lessons. This study suggests that the use of IL principles in lesson design and implementation can have a significant impact on students' academic performance and reinforce the importance of being autonomous and reflective learners. Teachers, lesson designers, administrators, and institutions are encouraged to consider these principles in their instruction and design activities and/or lessons that promote IL skills.

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Dr Xuanyu Chen, Beijing Normal University, China  
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 Dr Douglas Salazar, Mindanao State University- Iligan Institute of Technology, Philippines  
 Dr Perizat Yelubayeva, Al-Farabi Kazakh National University, Kazakhstan  
 Professor Yetti Zainil, Universitas Negeri Padang, Indonesia





# Upcoming Events

## Barcelona

**November 12-16, 2024**

The Barcelona Conference on Education  
The Barcelona Conference on Arts, Media & Culture

## Chiang Mai

**February 15-19, 2024**

The Southeast Asian Conference on Education

## Honolulu

**January 3-7, 2024**

The IAFOR International Conference on Education  
The IAFOR International Conference on Arts & Humanities

## Kyoto

**October 14-18, 2024**

The Asian Conference on Media, Communication & Film  
The Kyoto Conference on Arts, Media & Culture

## London

**July 11-15, 2024**

The European Conference on Education  
The European Conference on Language Learning  
The European Conference on Arts & Humanities  
The European Conference on Aging & Gerontology

## Paris

**June 13-17, 2024**

The Paris Conference on Education  
The Paris Conference on Arts & Humanities

## Tokyo

**November 25-28, 2024**

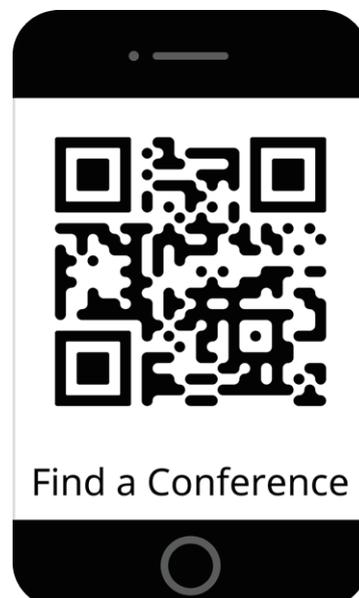
The Asian Conference on Education

**March 25-29, 2024**

The Asian Conference on Education & International Development  
The Asian Conference on Psychology & the Behavioral Sciences  
The Asian Conference on Aging & Gerontology

**May 23-27, 2024**

The Asian Conference on Cultural Studies  
The Asian Conference on Arts & Humanities  
The Asian Conference on the Social Sciences



# Introducing the IAFOR Research Centre at Osaka University, Japan

The IAFOR Research Centre (IRC) is a politically independent, international and interdisciplinary think tank based at the Osaka School of International Public Policy (OSIPP), at Japan's Osaka University, 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 Osaka University'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/](http://www.osipp.osaka-u.ac.jp/iaforresearchcentre/)



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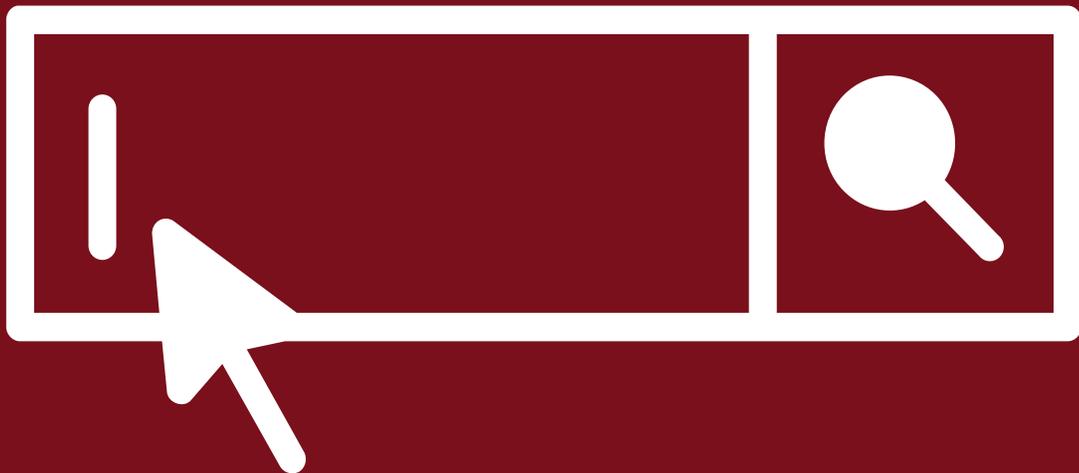
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