



The IAFOR Conference
on Educational Research
& Innovation (ERI2023)

April 21–24, 2023 | Washington DC, USA

PROGRAMME & ABSTRACT BOOK

Organised by The International Academic Forum (IAFOR) in
association with Virginia Tech, the IAFOR Research Centre
at Osaka University and IAFOR's Global University Partners

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Letter of Welcome



Dear Delegates,

I am very excited to be returning to Washington D.C., and to the wonderful Virginia Tech Arlington Campus, just across the Potomac River. As the capital of the world's most powerful country, this city is an intellectual and intelligence powerhouse and power center, and a great backdrop to be able to consider questions of education and research theory, practice and policy, and how this can have both local and global impact.

This conference is on Educational Research and Innovation, and as an organization working across, in, and through these areas of practice and theory, I am always particularly interested in how the conversations and ideas that we discuss over the next few days will help shape the future policies and operations of The International Academic Forum.

IAFOR is an exceptional platform for the discussion and sharing of your ideas and research across borders of nation, culture and discipline, and although this is one of our smallest conferences, of the 150 registrants onsite and online, more than 30 countries are represented. There is therefore a great opportunity to engage in comparative and contrastive discussions and to seek research synergies with those working in many different places across the world.

I encourage your full participation in the event, both onsite and online, and for you to take advantage of our membership programme which allows you to attend online presentations at IAFOR events throughout the year, and held globally.

Dr Joseph Haldane

Chairman & C.E.O, The International Academic Forum (IAFOR)

Guest Professor, Osaka School of International Public Policy (OSIPP), Osaka University, Japan

Visiting Professor, Doshisha University, Japan & The University of Belgrade, Serbia

Honorary Professor, University College London (UCL), UK

Member, Expert Network, World Economic Forum

Virginia Tech's Executive Briefing Center

About the Center

Virginia Tech's Executive Briefing Center

Virginia Polytechnic Institute and State University (Virginia Tech) is a public land-grant university serving the Commonwealth of Virginia, the nation, and the world community. The discovery and dissemination of new knowledge are central to its mission. Through its focus on teaching and learning, research and discovery, and outreach and engagement, the university creates, conveys, and applies knowledge to expand personal growth and opportunity, advance social and community development, foster economic competitiveness, and improve the quality of life.

With state-of-the-art technology and beautifully elegant meeting rooms, the Virginia Tech Executive Briefing Center (EBC) is located on the second floor of the Virginia Tech Research Center – Arlington, just blocks from the Ballston Metro station and I-66, and in the heart of the vibrant Ballston area rich with restaurants, shops, and nearby hotels.

Access By Metro

The center is about a five-minute walk from the Ballston-MU Metro Station on the Orange and Silver lines. Exit the station and turn west on Fairfax Drive. Cross N. Glebe Road, the make an immediate left. The building is mid-block.

Details about using the Metro can be found on the Washington Metropolitan Area Transit Authority (WMATA) website. <https://www.wmata.com/>

Driving Directions

From Washington D.C. (from the East)

- Take I-66 West to Exit 71 (N. Glebe Rd.)
- At the light at the top of the ramp, turn left (south) onto N. Glebe Rd.
- Turn right onto Ninth St.
- Turn right into the parking garage under the Virginia Tech Research Center, 900 N. Glebe Rd.

Address

Virginia Tech Executive Briefing Center, 900 N Glebe Rd, Arlington, Virginia 22203

Virginia Tech's Executive Briefing Center Floor Guide

Floor Map





April 21 | All times are Eastern Daylight Time (UTC-4) Friday at a Glance

Location: Virginia Tech Executive Briefing Center

- | | |
|--------------------|---|
| 12:00-13:00 | Conference Registration Falls Church Foyer |
| 13:00-13:05 | Announcements & Welcome Ballston Room |
| 13:05-13:15 | Welcome Address and Recognition of IAFOR Scholarship Winners Ballston Room |
| 13:15-14:00 | Keynote Presentation Ballston Room
<i>Embracing the Digital Shift:
Unleashing the Potential of Flexible Learning</i>
Dale Pike, Virginia Tech, United States |
| 14:00-14:45 | Featured Interview Session Ballston Room
<i>Learning Beyond Boundaries, Learning Beyond Borders</i>
Tomoaki Ishigaki, Embassy of Japan in the United States of America, United States
Joseph Haldane, The International Academic Forum (IAFOR), Japan |
| 14:45-15:15 | Coffee Break |



April 21 | All times are Eastern Daylight Time (UTC-4)
Friday at a Glance (cont'd)

15:15-16:45 **Featured Panel Discussion | Ballston Room**
Existential Questions in Education
Kālewa Correa, Smithsonian Institution, United States
Michael Menchaca, University of Hawai'i at Manoa, United States

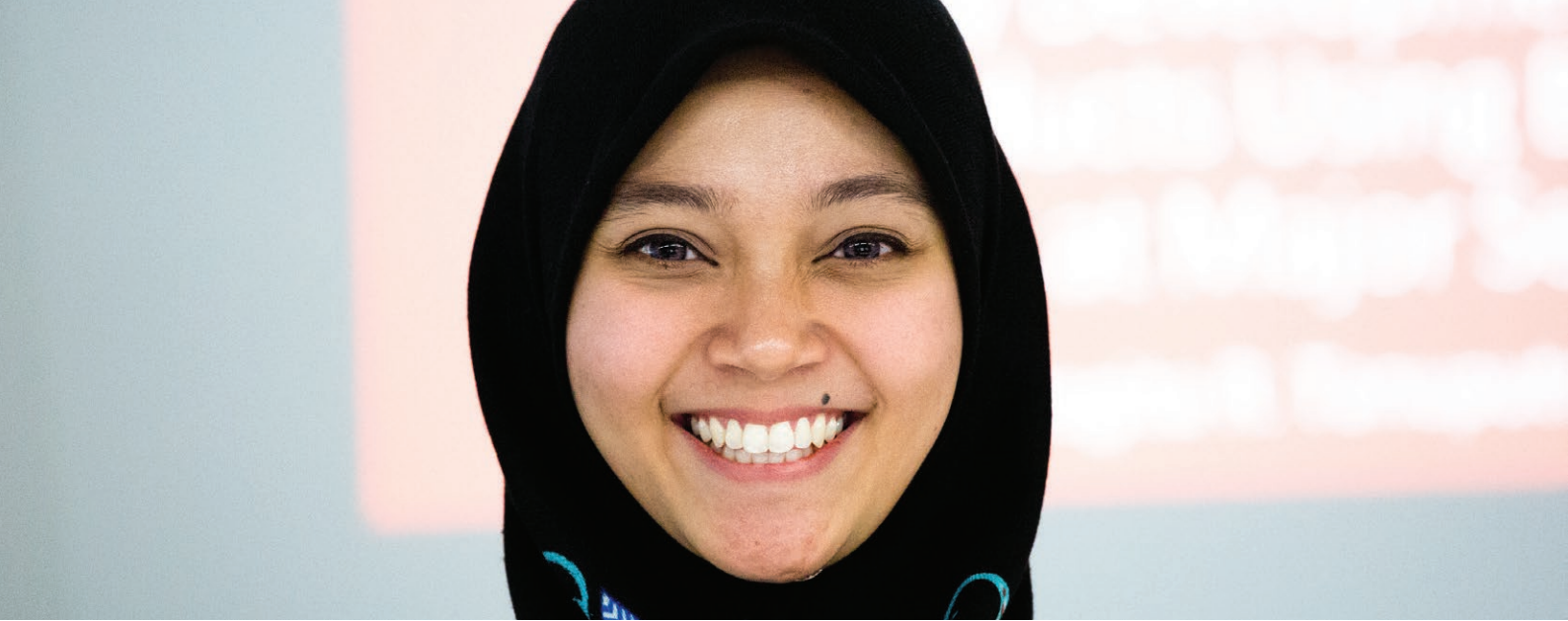
Keynote Presentation (15:15-15:45)
Research and Innovation
Michael Menchaca, University of Hawai'i at Manoa, United States

Keynote Presentation (15:45-16:15)
State or "State"?: The Innovations of the Hawaiian Kingdom
Kālewa Correa, Smithsonian Institution, United States

Panel Discussion / Q&A (16:15-16:45)

16:45-17:00 Conference Photograph | Falls Church Foyer

17:00-18:00 Conference Poster Session & Welcome Reception | Falls Church Foyer



April 22 | All times are Eastern Daylight Time (UTC-4) **Saturday at a Glance**

Location: Virginia Tech Executive Briefing Center

09:00-09:30	On-site Registration
09:30-11:10	On-site Parallel Presentation Session 1 Ballston Room: International Education Falls Church: Inclusive Pedagogy
11:10-11:25	Coffee Break
11:25-12:15	On-site Parallel Session 2 Ballston Room: International Education (Workshop) Falls Church: Intercultural Learning
12:15-13:15	Lunch Break
13:15-14:55	On-site Parallel Session 3 Ballston Room: Learner Experience Design Falls Church: Interdisciplinary Education
14:55-15:10	Coffee Break
15:10-16:50	On-site Parallel Session 4 Ballston Room: STEAM Education Falls Church: Instructional Design and Learning Sciences



April 23 | All times are Eastern Daylight Time (UTC-4) Sunday at a Glance

Location: Virginia Tech Executive Briefing Center

- | | |
|--------------------|---|
| 09:00-09:30 | On-site Registration |
| 09:30-11:10 | On-site Parallel Presentation Session 1
Ballston Room: STEAM Education
Falls Church: Emerging Philosophical Perspectives on Learning & Education |
| 11:10-11:25 | Coffee Break |
| 11:25-12:15 | On-site Parallel Session 2
Ballston Room: Learner Experience Design
Falls Church: International Education (Workshop) |
| 12:15-13:15 | Lunch Break |
| 13:15-14:55 | On-site Parallel Session 3
Ballston Room: Instructional Design and Learning Sciences
Falls Church: Experiential Learning |
| 14:55-15:10 | Onsite Conference Closing Session |



April 24 | All times are Eastern Daylight Time (UTC-4) Monday at a Glance

Location: Online

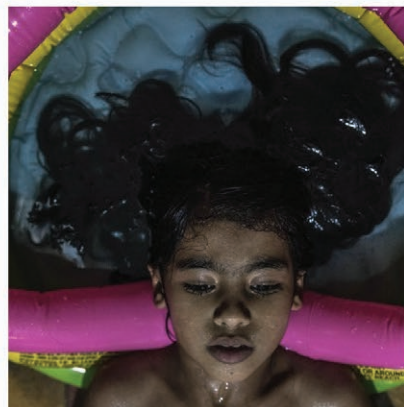
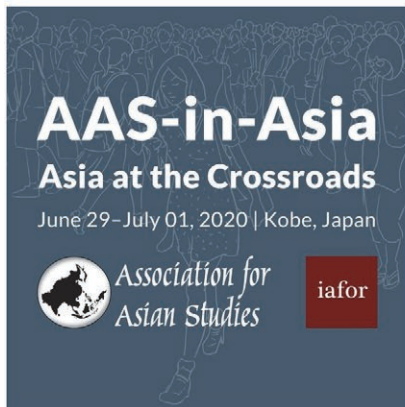
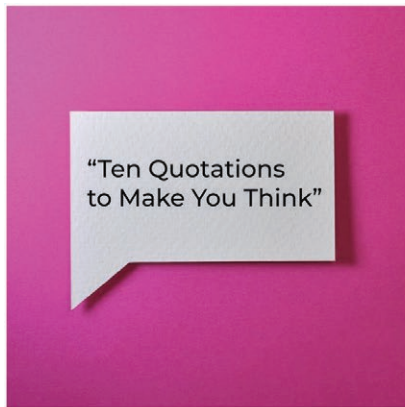
07:55-08:00 Message from IAFOR

08:00-09:40 Online Parallel Presentation Session 1
Room A: Enhancing Access to Education
Room B: Learning Experiences
Room C: Learner Experience Design

09:40-09:55 Short Break

09:55-11:35 Online Parallel Presentation Session 2
Room A: Higher Education
Room B: Culture and Arts-based Education
Room C: Interdisciplinary Education

11:35-11:40 Message from IAFOR



Follow The International Academic Forum on Instagram and join the conversation using the hashtag #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.

- Friday, April 21 | 12:00-17:00 – Church Falls Foyer
- Saturday, April 22 | 09:00-14:00 – Church Falls Foyer
- Sunday, April 23 | 09:00-14:00 – Church Falls Foyer
- Monday, April 24 | No in-person registration

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.

Connecting to WiFi

There is a free Wi-Fi 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.

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



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 May 24 2023, through the online system. The proceedings will be published on June 27, 2023.

Conference Catch-up

All Keynote Presentations and Sunday's 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.





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 backgrounds 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

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 the world over, largely with thanks 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

IAFOR Journal of Education

IAFOR Journal of Literature & Librarianship

IAFOR Journal of Psychology & the Behavioral Sciences

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

ERI 2023

Academic Grant & Scholarship Recipients

IAFOR's grants and scholarships programme provides financial support to PhD students and early career academics, with the aim of helping them pursue research excellence and achieve their academic goals through interdisciplinary study and interaction. 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

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.

Rio Jane Diaz (Live-Stream Presentation) **IAFOR SCHOLARSHIP Recipient**

Rio Jane B. Diaz is currently a Mathematics teacher at San Beda University. She graduated from the University of Santo Tomas with a bachelor's degree in Secondary Education, major in Mathematics. She is currently taking her Master's degree in Education, major Curriculum and Instruction at the same university.

68619 | *The Use of Mathematics Modules in Supporting Self-Regulation Among Junior High School Students in a Flexible Online Learning Environment*

Rio Jane Diaz, San Beda University & University of Santo Tomas, Philippines
Evelyn Songco, University of Santo Tomas, Philippines

Maria Savva (Virtual Presentation) **IAFOR SCHOLARSHIP Recipient**

Maria Savva is currently enrolled in a PHD program for Curriculum and Instruction in St. John's University located in New York City. Through her experiences, the student athlete stigma is prominent in everyday life and is elevated through social media and coverage. Because of this lack of focus on the wellbeing of athlete's, her interests include the experiences and perceptions of student athletes and its impact on their lives. The future goal of her research and education journey is to connect with non-profit organizations and NCAA to promote student athlete wellness and lifestyle.

67170 | *The Impact of the Student Athlete Identity*
Maria Savva, St. John's University, United States

Inspiring Global Collaborations

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

ERI2023 has attracted 100+ delegates from 40+ countries

Total Registrations: 122

Total (presenter) Registrations: 110

Audience Registrations: 12

By Country (Presenter Registrations)

United States - 32
Philippines - 17
Australia - 3
Brazil - 3
Germany - 3
Hong Kong - 3
Kuwait - 3
Malaysia - 3
Mexico - 3
Pakistan - 3
Qatar - 3
Saudi Arabia - 3
United Kingdom - 3
Indonesia - 2
Jamaica - 2
Japan - 1
Oman - 2
South Africa - 2
Spain - 2

Sweden - 2
Taiwan - 2
Thailand - 2
United Arab Emirates - 2
Zimbabwe - 2
Algeria - 1
Burkina Faso - 1
Canada - 1
China - 1
Colombia - 1
Czech Republic - 1
Ecuador - 1
Finland - 1
Ghana - 1
India - 1
Israel - 1
Italy - 1
Malta - 1
Netherlands - 1
Poland - 1
Singapore - 1
South Korea - 1
Trinidad and Tobago - 1
Vietnam - 1

Total Countries: 43

By Continent

Asia - 55
North America - 38
Europe - 17
Africa - 7
South America - 5

**International,
intercultural,
Interdisciplinary,**

IAFOR



Friday, April 21

Plenary Session

All times are Eastern Daylight Time (UTC-4)

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

Keynote Presentation: Dale Pike

Embracing the Digital Shift: Unleashing the Potential of Flexible Learning

Friday, April 21, 2023 | 13:15-14:00 | Ballston Room

Higher education faces challenges and opportunities across the globe. In addition to environmental and political challenges, we face specific issues such as shifts in the demographic composition of university students and the potential impact of technologies like AI on education and the workforce. To respond to these challenges, we must become more flexible, both in what we deliver and how we deliver it. To collectively prepare for this required flexibility, I propose a focus on building capacity in three key areas: faculty digital fluency, flexible learning modalities, and emerging technologies.

Enhancing faculty digital fluency is vital for navigating technological and societal changes. We'll define digital fluency and share specific strategies for faculty development, including training programs, peer mentoring, and augmenting resource accessibility. Through facilitation of continuous learning and adaptation, we enable educators to confidently navigate the ever-changing digital landscape.

Developing flexible learning modalities is essential for delivering learning experiences effectively. Traditional instructional methods may be too rigid to meet future needs. Through the application of learner-centered principles and leveraging adaptive learning technologies, we can tailor curricular offerings to more flexible modalities, ensuring success.

Consistently improving the adoption of emerging technologies requires a systematic approach to exploring and implementing them. This presentation will suggest strategies for identifying, evaluating, and integrating these technologies into teaching and learning, while overcoming adoption barriers. Examples of successful technology integration will offer insights into harnessing the potential of innovation.

By enhancing faculty digital fluency, developing flexible learning modalities, and consistently improving adoption of emerging technologies, we can deliver effective, boundaryless learning experiences that empower learners and redefine education.

Dale Pike



Dale Pike is an accomplished academic technology leader with over 29 years of experience in instructional technology and online learning in higher education. His past roles include serving as the Director of the Instructional Assistance Center at Snow College in Utah, Associate Dean for Instructional and Information Technology at UNC Charlotte, and Director of Academic Technologies at Boise State. He currently serves as the Associate Vice Provost for Technology-enhanced Learning at Virginia Tech.

In his current role, Dale oversees all aspects of institutional support for technology-enhanced learning, including comprehensive support for online and blended programs.

Services managed include instructional design and production, support for digital learning platforms (including Canvas and Zoom), and support for faculty digital fluency development. He also has responsibilities for improving the accessibility of learning content and environments and has a strong track record of advocating for, supporting, and delivering successful outcomes in this area.

His professional areas of interest include personalized learning, agile methodologies, and the study of creativity and innovation within organizations. Recently, generative artificial intelligence has dominated his time and attention, from leading workshops and faculty communities of practice to actively exploring the implications of this potentially transformative (and disruptive) technology.

Dale is also passionate about personal creative pursuits such as pottery, watercolors, and calligraphy. He is committed to making a positive impact in his community and is actively involved as a board member of the Blacksburg Refugee Partnership, a local nonprofit organization.

Featured Interview: Tomoaki Ishigaki

Learning Beyond Boundaries, Learning Beyond Borders

Friday, April 21, 2023 | 14:00-14:45 | Ballston Room

Education has long played an important role in expanding people's minds beyond the places and spaces into which they were born and raised. This includes from the home to the classroom, and from there to trips to local museums, places of interest and beyond. For many, this intellectual curiosity leads students, teachers and academics to travel, study and work abroad, and in doing so, they forge important personal and professional relationships between their home countries and those abroad.

However, as travelling beyond borders of discipline can have its risks, collaborating and colluding across cultural and international borders has its own, not least in times of global unrest. This interview with Japanese diplomat and legal scholar, Tomoaki Ishigaki, Minister at the Japanese embassy, will look at some of the challenges and opportunities faced in international education, research and innovation, drawing on his international experience and knowledge, with a particular focus on Japan and the United States.



Tomoaki Ishigaki

Mr Ishigaki is the Minister of Congressional Affairs at the Embassy of Japan in Washington, assuming the post in July 2021. This is his third assignment in the US as he has previously served in the Embassy (1997-1999) and the Japanese Mission to the UN in New York (2010-2013).

Since joining the Ministry of Foreign Affairs in 1994, he has covered a wide variety of bilateral and multilateral diplomacy including international trade, treaty negotiations at the United Nations, management of the Japan-US Alliance, humanitarian assistance and climate change talks.

Between 2018 and 2020, he served as the Deputy Cabinet Secretary for Public Affairs at the Prime Minister's Office where he was in charge of international media relations and public diplomacy. In his most recent position as Director of the Economic Policy Division at the Ministry of Foreign Affairs of Japan, he oversaw Japan's economic diplomacy which included attending G7 and G20 leaders' meetings and addressing trade and investment issues at WTO and other forums.

He is a graduate of Amherst College and studied law at the University of Tokyo before joining the Ministry of Foreign Affairs. He also lectured at the Department of Law at Keio University between 2007 and 2018. Additionally, he has taught International Relations at the University of Tokyo as well as International Environmental Law at the Graduate School of Law at Kyushu University.

Throughout his career, he has published a number of academic papers and contributed to books in the fields of international law, disarmament affairs, trade, and climate change policy.

Keynote Presentation: Michael Menchaca

Research and Innovation

Friday, April 21, 2023 | 15:15-15:45 | Ballston Room

Research and innovation play significant roles for progress. With progress, debate follows. Major innovations throughout history, while often beneficial, also cause concern and disruption, whether military innovations like the atom bomb, economic innovations such as the free market, or work innovations like the assembly line. Usually, debates surrounding concerns are confined to academics or industrialists. However, the recent eruption of the progress of artificial intelligence has caused almost universal consternation. Universities, corporations, military institutions, banks, and even K-12 schools express concern and debate the challenges of AI. We've heard stories about AI systems lying to get humans to do their work, or suggesting one researcher leave his wife for the system, and recently Elon Musk and other scientists have called for a halt to the "AI race". This almost universal reaction has led us to ask deep, existential questions about the role of research, innovation, and technology, about its effects on knowledge and education, and about an inconceivably changed future.



Michael Menchaca

Michael Menchaca is Chair of the Department of Learning Design and Technology at the University of Hawai'i at Manoa. He specialises in distance education, and has designed, implemented, and coordinated online and hybrid programs for over 20 years. He serves as editor for the *IAFOR Journal of Education: Technologies and Education Special Edition*. He was an IT specialist for many years in the public and private sector. He teaches and conducts research in the areas of online learning, technology integration, and social justice with technology.

Keynote Presentation: Kālewa Correa State or "State"?: The Innovations of the Hawaiian Kingdom

Friday, April 21, 2023 | 15:45-16:15 | Ballston Room

In 1843, the Hawaiian Kingdom was the first non-European country recognised as an independent state via the Anglo-Franco Proclamation. By 1893, that same country had over 21 treaties and 90 embassies operating worldwide; yet, this pre-United States rich history is often not widely known or presented in American education. Is this a coincidence or a matter of purpose? When information boundaries and patriotic-serving narratives are applied to historical truths, entire generations of progress can be swiftly obliterated in the blink of an eye. Nevertheless, through rediscovered histories unearthed in newspapers and archives, we are finding that it was 1800's Hawai'i that was a true leader of democracy in the world. Listeners will be introduced to newly understood political concepts and innovations from historical Hawai'i that are not widely accessible or taught.



Kālewa Correa

Kālewa Correa is the Curator of Hawaii and the Pacific for the Smithsonian Institution's Asian Pacific American Center. He graduated from the University of Hawai'i at Mānoa Kamakakū'okalani Center for Hawaiian Studies, where he focused on Hawaiian traditional society and politics. He also holds advanced degrees in Information Science and Education Technology. As Curator of Hawaii and the Pacific, Correa's primary program is the Digital Storytelling Initiative called "Our Stories." This initiative aims to elevate the voices of Pacific Islanders on a national and international stage through mixed

media formats such as film, podcasting, composition, and mixed reality.



Poster Presentations

**17:00-18:00 | Falls Church Foyer
Friday Poster Session**

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

17:00-18:00 | Falls Church Foyer

Friday Poster Session

Inclusive Pedagogy

69931 | *Evidence from Consequential Research on the Impact of Family-Community-School Partnerships on Student Achievement*
Suzan Yesil, Texas Tech University, United States

This article provides a review of the most recent theoretical and empirical literature on family and community involvement in schools with the goal of fostering a greater understanding of the most important practices in this area. The article discusses a variety of ways that families and communities get involved in their schools. In addition to this, it discusses the major categories of school-community partnerships, as well as the factors that influence how they are implemented and the outcomes they produce. Based on the findings, the author outlines the significance of the study as a way to strengthen the capacity of community involvement in schools to increase the likelihood of beneficial impacts for students, education professionals, families, and communities.

Purpose and Objectives: A partnership between the family, the school, and the community allows educational institutions and community agencies to involve families in meaningful and culturally relevant activities and help their children acquire new information and talents (Holme et al., 2022). Through collaborations, schools can meaningfully connect with families. Schools and community organizations support parents by listening to their concerns and providing materials. Participation in children's education is encouraged (Malone, 2020). This report reviews data on parental and community participation on academic success, noting that families affect children's academic performance. This review examines family-community-school partnerships.

International Education

69398 | *The Male Islamic Studies Teachers' Perceptions of the Extent of Including National Values in High School Courses*
Mesfer Alwada'i, King Khalid University, Saudi Arabia

The current research paper aims at exploring the male Islamic studies teacher's perceptions of the extent of including national values in high school courses. The researchers used the non-experimental research method to collect the study data. The results are based on a questionnaire conducted with 192 male Islamic studies teachers working in Saudi high schools. The study came out with important results among them are: there are valuable national values were included in Saudi high school courses and textbooks. The results also indicated that some of these national values were repeated in the content of these courses several times. In the light of those findings, the researchers recommend attention should be paid to adding more national values to the content reaping great benefits from the national values included and suggested in this study, and carrying out further research papers on the topic for other stages of courses at elementary schools, colleges and the like.

Workplace Learning

67568 | *High School Teachers and Cross-Disciplinary Collaboration: A Multiple Case Study*
Jessica Winter, St. John's University, United States

This pilot study employs multiple case study methodology to explore how teachers from the science and English departments in one public high school engage in cross-disciplinary collaboration, informally, in the workplace under the backdrop of new education standards that promote student learning across disciplines. A limited body of research addresses cross-disciplinary collaboration between teachers at the high school level. Such collaboration is often modeled within the formal context of professional development, identifying a need to explore if and how this process occurs informally in the workplace. Data collection methods include observation, researcher reflective memos, semi-structured interviews, as well as focus group interviews. Following the procedure for grounded theory, these data are first subjected to thematic analysis to develop a theory and generate categories that then inform within- and cross-case analysis for each department. The implications of this study offer possible changes in school culture by incorporating cross-disciplinary collaboration to satisfy the objectives of new educational standards.

17:00-18:00 | Falls Church Foyer

Friday Poster Session

Artificial Intelligence and Adaptive Learning

68851 | *Use of Assistive Technology to Teach Emotions to Children With Autism Spectrum Disorder*
Momodou Barry, Asia University, Taiwan

The neurological condition known as autism spectrum disorders (ASD) is a lifelong condition that impairs behavior, speech, and social interaction. One of these individuals' challenges is recognizing their feelings. With the use of assistive technology and gamification approaches, the current study exhibits the initial exploratory stage of the creation of a computer tool for children with ASD to comprehend emotions. The related works in our field of research are displayed, and our key distinction from them is noted. The METUIGA technique has been applied to the software development process, disclosing a portion of the procedures needed to create the program. The initial findings of a preliminary Nielsen heuristic usability evaluation are presented, with specialists in the teaching of ASD-affected youngsters finding the system interfaces to be usable.

69690 | *The Role of Artificial Intelligence in the Development of Teaching Effectiveness: A Tool for Personalization of Learning in Higher Education*

María Ines Valencia, Universidad Tecnológica Empresarial de Guayaquil, Ecuador
Mara Cabanilla Guerra, Universidad Tecnológica Empresarial de Guayaquil, Ecuador
Galo Cabanilla Guerra, Universidad Tecnológica Empresarial de Guayaquil, Ecuador

Artificial Intelligence (AI) has become one of the most important sustainable technology tools today because it offers several advantages for teachers and students that allow them to improve their performance in their academic and professional activities. Through the use of this tool people can automate repetitive tasks and free up time for more meaningful learning. There are many advantages to using artificial intelligence to improve efficiency, personalize learning and improve teaching in higher education, but it is important to carefully consider its implications and use it responsibly. Additionally, artificial intelligence can have both positive and negative effects on teacher effectiveness. On one hand, AI can assist teachers in grading and assessment, freeing up time for other tasks, and providing personalized learning experiences. On the other hand, AI can also be a source of bias, limit the creativity and critical thinking skills of students, and reduce the human interaction and mentorship that is important in education. The impact of AI on teacher effectiveness ultimately depends on how it is used and integrated into the teaching and learning process. Artificial intelligence (AI) has the potential to greatly enhance the effectiveness of teaching. One way this can be achieved is through the use of AI-powered educational tools, such as personalized learning platforms that can adapt to the unique needs and learning styles of individual students. However, it is important to note that AI should be used as a tool to support teachers, not replace them.

Saturday, April 22

Parallel Sessions

All times are Eastern Daylight Time (UTC-4)

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

09:30-11:10 | Ballston Room

Saturday Onsite Presentation Session 1

International Education

Session Chair: Jovani Castelan

09:30-09:55

69907 | *Erasmus Mundus European Master: Transformative International Learning Through Collaborative Experience*
Agnieszka Naumiuk, University of Warsaw, Poland

The aim of the presentation is to show the value of constructivist approach (Vygotsky, Bruner) to the concept of innovation as a learning process, based on the author's analysis of 9-years old European Masters Program: ADVANCED Development in Social Work. The initial idea of introducing innovation as an experiment in the area of joint international study, proposed by five European universities, turned into a long-term transformative learning process (Mezirow), adopting the culture of innovation, with the aim for long-term change in higher education systems. It involves theoretical frameworks of participants' collaborative experience (Dewey) and cultural capital (Bourdieu). The study of this phenomenon, through program documents' analysis, participatory observation and students' work evaluation, allows to assert that innovation concept incorporated into educational model, in long-term perspective, empowers participants of the process.

Program analysis confirms that the role of innovation in transforming higher education should be more closely studied and evaluated, as in the given case, it proved the transformative and pro-innovative learning of participants experiencing its processual modifications. The research identified the following phases' characteristics: 1) initial phase (planning and implementing innovation), 2) maintaining phase (adaptation to become innovative, yet stable concept), 3) modernization phase (changes necessary to reshape aging innovation). All phases developed gradually, through micro-changes. The presentation will conclude on the educational value of redefining the role of innovation as a collaborative learning process, making us rethink simple replication of business talk, and reflect on it from human development perspective.

09:55-10:20

69759 | *Entrepreneurial Education: Pedagogical and Methodological Innovations in the Brazilian's Engineering Courses Curriculum*
Jovani Castelan, UNISATC, Brazil

The interest of students in engineering courses has been decreasing since 2014 and this downward trend has increased after pandemic, since many students express interest in health area. On the other hand, companies have searched skilled labor's students from universities to compose their staff but they are not able to find. Thus, considering the needs of companies and universities, a new engineering curriculum model was developed, based on entrepreneurial education, active methodologies, non-linear skill modules, integrating projects and Entrepreneurship Course Conclusion. Besides that, a support program to cover student's study expenses was designed, funded by companies and university. The objectives are: a) to arise student's interest for engineering; b) provide qualified workers for the professional Market even before their graduated and c) to develop innovation focused on social demands, since beginning of the courses. In short, the innovations based on new curricula are: 1) Engineering Practices subject in the first period of the course; 2) decreasing of Calculus subjects' studying hours and use mobile platform in these subjects to monitor the execution of projects with real applications; 3) integrative projects that integrate and apply the knowledge developed in the same module's subjects and 4) Entrepreneurship Course Conclusion (ECC), approaching economic and commercial viability of an idea, replacing the traditional Course Conclusion Work, based on scientific aspects only. In an ECC, it's possible to join students of different courses, developing an interdisciplinary work. The integrative projects must be developed to an institution or Community, aiming real and applicable solutions to benefit them.

10:20-10:45

68232 | *The Role of Principals' Emotional Intelligence on School Leadership Effectiveness*
Daniel Gebreslassie Mekonnen, Panjab University, India

The study has aimed at investigating the role of principals' leadership styles and their emotional intelligence (EQ) on the work motivation and job performance of teachers in Addis Ababa, Ethiopia. As a means, quantitative research approach and descriptive research design were employed to conduct the study. The path goal leadership questionnaire, emotional competence inventory, multidimensional work motivation scale and job performance appraisal scale were used to collect data from the 316 teacher participants. The quantitative data were analyzed by using the statistical techniques of Pearson-product moment correlation analysis, Two-way analysis of variance and the stepwise multiple regression analysis. Major findings of the study have revealed that work motivation and job performance of the teachers were significantly correlated with the perceived participative leadership style, achievement-oriented leadership style and EQ of principals. Moreover, the EQ of the principals was found to be the best predictor of the teachers' work motivation whereas the achievement-oriented leadership style of the principals was identified as the best predictor of the job performance of the teachers. Furthermore, the interaction effects of all the four path goal leadership styles vis-à-vis the EQ of the principals have shown differential effects on the work motivation and job performance of teachers. Thus, it is reasonable to conclude that EQ is the sine qua non of effective school leadership. Hence, this study would be useful for policy makers and educational leaders to come up with policies that would enhance the role of EQ in the effectiveness of school leadership.

10:45-11:10 (CANCELLED - Moved to Virtual Presentation)

67988 | *Research Labs: Cultivating Impact Through Collaboration*
Diane Derr, Virginia Commonwealth University in Qatar, Qatar

VCUarts Qatar is the branch campus of the School of the Arts at Virginia Commonwealth University (Richmond, Virginia), located in Qatar Foundation's Education City (Doha, Qatar). In 2022 the VCUarts Qatar campus formalized a Research Lab initiative in an effort to cultivate trans- and multi-disciplinary research for increased impact in the community, the classroom, and wider discourse. The formalization of this initiative was driven by an aligned synergy between faculty interests and stakeholder priorities. The VCUarts Qatar Research Labs comprise collaborative teams of faculty, students, and alumni, pursuing a territory of inquiry through iterative explorations. The Labs are rooted in a broad and diverse spectrum of domains, including Arabic typography, art and law in the Gulf region, cultural preservation and production, emergent technology, graphic publishing, nanotechnology and textile manufacturing, culturally responsive pedagogy, product design, sound design, and statistical analysis. This paper will present an assessment of the Research Lab model, established on the VCUarts Qatar campus, addressing key aims and goals, including partnering with local industry in Qatar for increased community engagement, increasing awareness of societal impacts and contributions of Creative Research, supporting impactful research activities and dissemination through multi-disciplinary collaborations with VCU (home campuses) and Education City Partner Universities, and supporting human capacity development in creative research.

11:25-12:15 | Ballston Room

Saturday Onsite Presentation Session 2

International Education

Workshop Session

11:25-12:15

69978 | *Student-led Professional Development for Teachers – Engaging Student Voice in Professional Learning*

Careene McCallum, Hillel Academy (An International School), Jamaica

Lloyd Holmes, Hillel Academy (An International School), Jamaica

An international school is enriched with students from diverse cultural and social backgrounds. This diversity presents opportunities to challenge how we educate, so that learning environments are inclusive and equitable. This can be achieved through a deliberate approach to student agency. Our “Student-led Professional Development (PD) for Teachers” framework challenges schools to reflect and act on this question - is there a willingness to provide a platform for students to engage us about how they learn, their learning activity preferences and what matters most to them?

As Dr. Quaglia notes we have to start ‘viewing students as the potential and not the problem’. If we are to truly empower students we should determine how much prominence we give to students’ voices inside the curriculum. It is important to expand beyond the normative practice of passively and implicitly valuing their voices. This initiative promotes inclusivity as learners are invited to dialogue on what best supports their learning and interests. The workshop will be focused on sharing the framework for student-led PD for teachers and will provide evidence of its impact on our school. We will also share this initiative’s relevance to Sustainable Development Goal (SDG) 4 - “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” Participants will gain innovative and enlightening perspectives on how deliberate actions can have profound and long-lasting effects on student empowerment, building a learning community, refocusing teacher mindset and rethinking systemic norms.

13:15-14:30 | Ballston Room

Saturday Onsite Presentation Session 3

Learner Experience Design

Session Chair: Dorit Olenik Shemesh

13:15-13:40

66648 | *Intermediate Pupils' Physical Activity Level in the Time of Pandemic*

Sara Jane Sanclaria-Cruz, Rizal Technological University, Philippines

Mylene Capino, St. Paul College Pasig, Philippines

The onset of the pandemic opened new challenges for everyone which transcends not just from the type of learning delivery and the curriculum to follow, but also to the extent of how the schools can sustain their learners by doing physical activities even at home. Being part of the objectives of Physical Education, it is essential that the school and its teachers know the physical activity level of the pupils and what barriers they face that hinder them to be physically active. Thus, in the course of this study, a survey was administered to the intermediate pupils in Pasig City, Philippines to reveal their physical activity levels. Using the predictive correlational design, it was discovered that both Grades 4 and 5 pupil-respondents have low physical activity while both Grade 6 pupils, showed average physical activity levels. The administered survey also showed that Grade 4 pupils are influenced by a Lack of Willpower that hinders them from being active. On the other hand, the Grade 5, Grade 6, and FLCS pupils all perceived that it is the Lack of Energy that prevents them from moving. With these data, it can be recommended that learners should be exposed to and encouraged to integrate physical activities in school through a structured Fitness Log Sheet and Physical Activity Moments during the Morning Rites, Homeroom-Advisory Period, and 5-minute before-class stretching. On the other hand, a look at the schoolwork loads should be reviewed to mitigate pupils' Lack of Energy.

13:40-14:05

69911 | *Re-imagining Built Environment as Learning Experience*

Fariha Hayat Salman, Iqra University, Pakistan

This study re-imagines the built environment as a learning experience design that ties in with the big vision of a sustainable future propelled by the global focus on the UN's Sustainable Development Goals. It serves as an innovative way forward within a context where scholars have long lamented the absence of an integrated approach to sustainability education (McCullough, 2014; Salman & Riley, 2019; Schiller et al., 2012). The design is undergirded by an Augmented Reality Learning (ARL) platform that enabled a technologically mediated tour of a solar demonstration house for college and high school students (aged 15-20 years) to learn about sustainable engineering design concepts. Students were guided to focus on specific engineering design concepts and to respond to assessments on a mobile app on their touch screens while observing the physical features of the solar house. Methodologically, design based research (DBR) was carried out through several design iterations. For data collection and analyses, the study drew on digital ethnography and interaction analysis. Data sources included video recordings and open ended post interviews supported by pre-and post-tests, and analytics from the ARL platform. Data was analyzed using multimodal interaction analysis where learner interactions were examined through the three pronged theoretical lens of 'place-embodiment-meaning making'. Findings revealed that the embedded curricular frames of 'analyze-design-evaluate' allowed learners to notice and uptake design concepts. Moreover, learners coordinated their sensorimotor capacities (i.e., gaze, touch, speech, spatial positioning) and the technological content as a mutually constitutive strategy for design-focused learning.

14:05-14:30

68195 | *An Educational Program for Coping With Preschoolers' Aggressive Behaviors: The Impact of Digital Technology*

Dorit Olenik-Shemesh, The Open University of Israel, Israel

Tali Heiman, The Open University of Israel, Israel

Karen Galloway, The Open University of Israel, Israel

The current study examined the impact of a digital educational program for prevention of aggressive behaviors and promotion of pro-social behaviors, among kindergarten children. For this purpose, a special education program for coping with children aggressive behaviors was modified into digital platform (tablets) and was imparted to kindergarten children by their kindergarten teachers, for a full academic year. It was hypothesized that among children who will be exposed to the digital program, there will be a decrease in aggressive behaviors and an increase in pro-social behaviors, compared to children who will be exposed to the traditional and control groups. One hundred and fifty two children (aged 4-5) were divided into three study groups: A digital intervention group, a traditional intervention group and a control group. The children aggressive behaviors and pro-social skills were evaluated by the kindergarten teachers, before and six months after the program was completed. Results revealed that after completing the program, the level of aggressive behaviors in the digital group decreased significantly compared to traditional and control groups, with similar results for three different types of aggression (proactive, reactive, mixed aggression). Furthermore, a significant increase was found in the level of pro-social behaviors in the digital study group, compared to the traditional group, while a significant decrease was found in the traditional study group. The effectiveness of a digital educational program in preventing and coping with aggressive behaviors and its' potential to enhance social learning, social skills and interpersonal behaviors in an early age will be discussed.

15:10-16:25 | Ballston Room

Saturday Onsite Presentation Session 4

STEAM Education

Session Chair: Jacqueline Van Muijlwijk-Koezen

15:10-15:35

68021 | *Assessment of Green Supply Chain Management Practices and Organizational Performance of a Higher Educational Institution in the Philippines*

Ferdinand Mercado, De La Salle Lipa, Inc., Philippines

This paper assesses the green supply chain management (GSCM) practices and organizational performance of a Higher Educational Institution (HEI) in the Philippines. The researcher uses structured questionnaires as a tool in data gathering. Employees of De La Salle Lipa (DLSL) in the supervisory, managerial, and top-level administrators who are directly and indirectly engaged in the supply chain activities of the institution served as respondents. The results reveal that among the six GSCM practices (organizational commitment, eco-design, green purchasing, green marketing, investment recovery, and environmental practice), only eco-design has a significant positive effect on the organizational performance of DLSL. However, the overall Green Supply Chain Management practices have a significant effect on the institution's organizational performance. Organizational commitment is one of the driving forces to a greener supply chain and DLSL must put a more vigorous effort to cascade the idea in more general or simple terms for a better understanding of the direction and current status of the school in relation to sustainability. Such as clearly indicating the top management's motive and actively requesting support in relation to sustainability at all levels of the organization.

15:35-16:00

68143 | *The Power of Socio-Emotional Learning and Grit in the Math Classroom*

India White, University of Florida, United States

Studies show that the U.S. averages 4 school shootings every week. Further, there has been an increase in depression and suicide among students nationwide. Students have felt alone, with statistics finding that 1 in 5 students battle mental illness. Teachers need to be equipped with tools to help students overcome and establish healthy relationships in the math classroom. This can be accomplished through Socio-emotional learning. Socio-emotional learning is the ability to help students understand their feelings in the classroom and how they interact socially with others. Grit is the passion and perseverance to achieve long-term goals. Through Socio-emotional learning, students develop in 5 areas which are 1) self-management, 2) social-awareness, 3) relationship skills, 3) responsible decision-making and 5) self-awareness. The Power of Socioemotional Learning and Grit will provide educators with the tools needed to thrive in relationship building with students. This session will feature strategies for teacher use that will incorporate SEL and grit in their classroom in ways that produce measurable results. This workshop will include a PPT presentation with research from recent and relevant data from credible national resources and journal articles. Attendees will walk away with a greater understanding of how they can connect with their students and motivate them to excel in math class when they feel like giving up. As the information from this presentation is applied, attendees will notice students with a greater sense of belonging, math identity, and healthier relationships established in the math classroom.

16:00-16:25

69402 | *Engaging Students With 3D Tools and Virtual Reality: Improving Spatial-reasoning Skills in (Bio)Chemistry*

Jacqueline Van Muijlwijk-Koezen, Vrije Universiteit Amsterdam, Netherlands

Anton R. Blaazer, Vrije Universiteit Amsterdam, Netherlands

Spatial reasoning is critical in all areas of modern chemistry and biochemistry. A lack of such skills leads to chemical misconceptions and a shortcoming in understanding relevant molecular representation(s). At the university, the average student's three-dimensional (3D)-reasoning skills are not developed enough to match the level required in future industrial or academic positions. Currently, there are no effective approaches that address this issue. We initiated this project to research and develop a novel classroom-activating tool to mitigate this shortcoming. By combining our experience with 3D molecular modelling software and didactic method development, we designed a platform that brings 3D and virtual reality (VR) representations of biomacromolecules (e.g., proteins; DNA) and small molecules (e.g., drugs; enzyme substrates) to the classroom. One of the goals was to develop a tool that runs on mobile phones and provides VR capabilities through low-cost cardboard VR goggles. Another goal was to develop a heuristic teaching method that actively allows students to develop spatial reasoning skills using 3D and VR tools. The 3D/VR tool was integrated with two conventional first-year BSc biochemistry lecture series and was well-received by students. The impact it has on students was investigated using online and post-course questionnaires. Overall, students were enthusiastic, well-engaged, and perceived the intervention contributed to their spatial reasoning skills

09:30-11:10 | Falls Church

Saturday Onsite Presentation Session 1

Inclusive Pedagogy

Session Chair: Maria Efstratopoulou

09:30-09:55

69986 | *Supporting Youth Resilience in Under Resourced Communities with Digital Out of School Programs (OSP)*

Yigermal Demissie Ayalew, Loyola University Chicago, United States

Kevin Miller, Dominican University School of Social Work, United States

Overcoming trauma due to violations of human rights and marginalization of individual and collective identity is essential for youth, especially to enable those marginalized due to poverty and racism to become conscious social actors capable of participating in socio-political life. This presentation reports on conceptualizations from an OSP, "Law Under Curious Minds: Narratives of Social Justice" (LUCM), which engages youth as active agents in developing remedies for the human rights violations they experience. The study provides a "mid-level theory" of the development and implementation of virtual out-of-school group programs for underserved youth in diverse contexts such as schools, churches, and community centers. A human rights and transitional justice framework is used to create critical pedagogical spaces for youth to negotiate and co-construct knowledge, narratives, and action strategies towards social justice. Participation of youth in program design/implementation is foundational and achieved using an emergent curriculum. Respecting individual tolerance for a degree of self-revelation, including participation and camera status, are instrumental to fostering an environment of trust. Opportunities for collective discussion and critical inquiry must be backed by individualized scaffolding. Several digital tools are available to model virtual spaces as stimulating and engaging contact zones, which bring the personal and collective together to elevate participation to material consequences individually at the emotional level, relationally by building positive youth modeling and alliances, and collectively in leveraging such alliances for advocacy and social action. Digital OSPs can enhance physical safety despite community violence, give youth relative control over their schedules, and expand OSP access.

09:55-10:20

68004 | *Task-based Design and Interaction Patterns: Exploring Multidimensional Engagement Among Young ESL Learners*

Randy Magdaluyo, University of Technology and Applied Sciences - Salalah, Oman

Claire Orpilla, University of Technology and Applied Sciences - Salalah, Oman

Anwaar Ahmed, University of Technology and Applied Sciences - Salalah, Oman

One crucial aspect of language teaching is designing and providing meaningful contexts for student engagement. Second language acquisition (SLA) studies argued that engagement is a multidimensional construct that encompasses the learners' mental, behavioral and social aspects (Lambert & Philp, 2015; Fredricks, Blumenfeld & Paris, 2004). As such, the learners have to display focused attention and construct their own knowledge (cognitively engaged); show positive willingness and autonomous disposition in tasks (affectively engaged); and interact with others and initiate responses (socially engaged) (Svalberg, 2009). This study presents the task-based interaction patterns in a third-grade English as a second language (ESL) class with 25 Asian-American immigrant students in a public K-8 charter school in Philadelphia. Based on Svalberg's model of engagement with language (2009) and Boyd and Rubin's concept of student critical turns (2002), the students engaged in a series of small group narrative and information-gap activities. The students' interactions were quantitatively and qualitatively analyzed based on a coding scheme (Baralt et al., 2016) using data from audio recordings and transcriptions, classroom observation records, and student motivation questionnaires. The results showed limited interactions in task with instructions or examples only, and elaborated interactions in task instructions followed by on-task guidance and feedback. Moreover, students' task interactions included asking voluntary questions, formulating predictions, and noticing linguistic features (cognitive); expressing willingness and empathy (affective); participating in negotiations and taking roles (social). Thus, the study highlights the need for multidimensional and developmental task designs with inclusive teaching methodologies for increased engagement among ESL learners.

10:20-10:45

67341 | *Assessing Children at Risk: Psychometric Properties of the Arabic Version of the Motor Behaviour Checklist (MBC) in Primary School Settings*

Maria Efstratopoulou, UAEU, United Arab Emirates

Max Opoku, United Arab University, United Arab Emirates

Hala Elhoweris, United Arab Emirates University, United Arab Emirates

Children's emotional, behavioral and developmental problems can be properly identified and assessed based on observations from their teachers and parents. The Motor Behavior Checklist (MBC; Efstratopoulou, Janssen, Simons, 2012) was designed to assist classroom teachers and Physical Education (PE) teachers in assessing their students' motor-related behaviors. The present study aimed to apply the newly developed Arabic version of the MBC checklist at mainstream Schools in UAE, examine the structural and discriminant validity of the Arabic version of the MBC and to assess the effect of gender, age and type of disability on children's behavior. A sample of 304 children (aged 6-12 years) were rated by their teachers using the 59 items of the MBC checklist. A Confirmatory Analysis of the data revealed that the Arabic version of the MBC is a valid measurement to assess behavioral problems in children in UAE. A MANOVA analysis indicated that there were differences among children rated by their teachers due to gender -with boys scoring higher in all problem scales- and due to the type of disability- with children with ASD and ADHD scoring higher than their typical developing peers on most of the problem scales. Finally, a path analysis on the data revealed that Internalizing behaviors could predict Externalizing behavior problems. Strategies to Identify and support students with behavioral problems in School settings are discussed.

10:45-11:10

68041 | *Reflective Practice and Whole Brain Teaching in Reading and Writing Classes: A Case Study of a Novice ESL Teacher*

Randy Magdaluyo, University of Technology and Applied Sciences - Salalah, Oman

Claire Orpilla, University of Technology and Applied Sciences - Salalah, Oman

Leah Alconis, University of Technology and Applied Sciences - Salalah, Oman

Reflective practice has become an increasingly essential skill among English language teachers. Recent studies have indicated that reflective practice actively and systematically engage teachers in examining and improving their teaching assumptions, expectations, actions, and decisions. As a result, reflective practice helps teachers transition from being curriculum transmitters to being autonomous decision makers who continually learn and reconstruct their teaching experiences through reflection (Widodo & Ferdiansyah, 2018; Crandall & Christison, 2016; Larrivee, 2008). This paper presents a case study of the instructional practices and reflections of a novice English as a second language (ESL) teacher in a Philippine university who implemented the whole brain teaching method in reading and writing classes during his first year of teaching. Anchored on Farrell's (2015) framework for reflecting on practice that encompasses five levels (philosophy, principles, theory, practice, and beyond practice), the teacher's reflections were qualitatively coded and analyzed using data from teacher logs, peer observation records, semi-structured interviews, lesson study reviews, and teaching portfolio. The results revealed recurring themes of (1) establishing morality, (2) welcoming diversity, (3) fostering curiosity, (4) inspiring creativity, (5) negotiating authority, (6) sharing accountability, and (7) constructing global-local identity, which significantly influenced the personal and professional decisions and actions of the novice teacher. Thus, implications for adopting a holistic approach for reflective practice in the pre-service and in-service ESL teacher programs were discussed.

11:25-12:15 | Falls Church

Saturday Onsite Presentation Session 2

Intercultural Learning

Session Chair: Jay Binueza

11:25-11:50

68922 | *Mirroring Care and Service: Community Engagement*

Jay Binueza, De La Salle-College of Saint Benilde, Philippines

Magdalena De Leon, De La Salle-College of Saint Benilde, Philippines

The performing arts have transcended their essence by bringing the stage to the community to become a tool for education, empowerment, and care. This paper examines how the De La Salle-College of Saint Benilde - Philippines employed a performing arts workshop for De La Salle Butitin in Nabawan, Malaysia, which is a hostel for underprivileged students who are taught to practice the Lasallian way of life. This project had seven workshops: dance, acting, music and audio, props, costume design, visual arts and set design which all aim at developing transferrable skills that allowed students to plan, design, and implement their own stage performances. The study employs mixed method. The researcher uses interview and survey questionnaire to gather the data from the participants and were analyzed using a statistical software IBM-SPSS V 27. Mean and standard deviations are used to show agreement to statements/questions and the variability of answers of respondents in the questions. Guided interviews and project evaluation results show that the participants did not only experience a nurturing process in theatre making but also achieved motivation and confidence to tell their stories onstage. Apart from proving that the performing arts come along with a nurturing pedagogy, the project has fortified a service-learning curriculum for Benilde. A way to immerse and empirically engage the Benildean students to comprehend how performing arts is an effective tool for social, education and political change via their experiences in different courses. This will aide them for a fun-filled lens to become critical, creative and productive by sharing their learned skills to their respective communities and to the underprivileged.

11:50-12:15

67697 | *Designing a Culturally Responsive Parent-Teacher Collaboration System for Hispanic Immigrant Families: Applying the Findings of a Content Analysis Study*

Eric Shyman, St. Joseph's University, United States

Much evidence suggests that an effective parent-school collaboration model can have multiple benefits for students and families. However, research also indicates that there are significant barriers posed to families from historically marginalized groups. This presentation will report the findings of a rigorous latent content analysis of the extant literature examining the parent-school collaboration experiences of Hispanic immigrant parents. Three waves of analysis were implemented. During the first wave, the researcher implemented an exhaustive search of the ERIC via EBSCO database accessed through his university library system using various search terms and limiters and retained articles that fit the description of involving parent-school collaboration of Hispanic immigrant families published between 2008 and 2022, resulting in 20 total culled articles. During the second wave, the researcher reviewed the articles to determine nascent constructs or concepts common among the articles. During the third wave, units of meaning were determined to function as final descriptors for the content analysis. Findings revealed the following two common descriptors: (1) Cultural differences in the meaning(s) of relevant terms; (2) Narratives of exclusion and blame. The findings of this study can be applied to design or redesign parent-school collaboration models that appear to marginalize Hispanic immigrant parents. These elements include broadening conceptualizations of key areas, understanding collective versus individualistic cultures, and refocusing the role of the teacher from "educative" to "inclusive".

13:15-14:30 | Falls Church

Saturday Onsite Presentation Session 3

Interdisciplinary Education

Session Chair: Anu Anna Jossan

13:15-13:40

69868 | *Educating Societal Messages – The Role of Time Orientation, Risk, and Reward Frame*
Myoung-Jin Chae, Soonchunhyang University, South Korea

The importance of investment in education is becoming greater with its capability to improve society and future generations. While extant literature focuses much on content characteristics to enhance engagement for promotional messages, relatively little is known about how to deliver effective societal messages to generate greater engagement. In this study, we use a combination of societal messages in social media from an agency and LIWC software along with online experiments to examine content characteristics and message frames that improve audience engagement. Based on Construal Level Theory, we show that societal messages with future orientation generate higher audience engagement. The findings suggest that a higher fit between message scope and audience mental representation leads to effective delivery for societal contents. In addition, we explore whether societal messages should be framed with risk or reward based on Regulatory Focus Theory. Preliminary findings and implications in learning will be discussed during the session.

13:40-14:05

68642 | *Professional Writing and Data Analytics Immersion Bootcamp*

Steve Zhou, University of Houston Downtown, United States
Song Ge, University of Houston Downtown, United States

There is always a critical shortage of nurses, especially competent nurses in the US. The shortage has escalated in the past years due to COVID-19 and population aging. To become nurses, students choose to complete an associate degree in nursing (ADN) from a community college and pass the NCLEX exam. Then, working as part-time RNs, they complete their RN to Bachelor of Science in Nursing (BSN) study, which opens their doors to numerous opportunities.

However, research studies have revealed that many nursing students experience significant challenges in professional writing, looking up and critiquing health-related research papers, understanding the meaning of data, and working on group writing projects. This is partly because, during their ADN study, they are not exposed to instructions about writing and data analytics. These challenges could last during their RN-BSN studies and even after students complete the program, eventually leading to poor clinical performance and patient care.

Research has shown that the use of workshops is an effective approach to enhance nursing students' writing skills. We construct a professional writing and data analytics immersion Bootcamp to facilitate nursing students in developing essential writing, data analytics, and research skills before they begin their RN-BSN study. This Bootcamp is to be used as a focused, structured, extended orientation where we teach nursing students many practical skills needed for their study and work through faculty lectures, guest lectures, one-on-one mentorship, quizzes, and readings. This Bootcamp will lay a solid foundation for students' success in their RN-BSN study and future careers.

14:05-14:30

68194 | *Critical Thinking Skills Gap in Data-Driven Decision Making: An Exploration in the Banking, Financial Services, and Insurance Industry*

Anu Jossan, Al Rayyan International University College - University of Derby, Qatar

Banking, financial services and insurance companies (BFSI) are leading employers for business graduates. With heavy usage of data in the BFSI companies' departments, graduate employees make data-driven decisions (DDD) that impact businesses. Hence, decision quality remains a crucial criterion for graduate employability and business success. Critical thinking (CT) for decision-making is proven to be an effective way for quality decisions. Nevertheless, CT usage on data-driven decision-making (DDDM), in the context of BFSI companies, remains unexplored. A skill gap analysis shall throw light on the employer expectation vs satisfaction on graduate data-driven decision quality using critical thinking. This research explores the perception/expectation, and satisfaction of the BFSI employers on graduate employees' data-driven decision outcomes and the critical thinking skill usage on DDDM is analysed to find out if there is an evident gap in the same. Data were collected from 106 Junior, middle, senior and executive-level managers from different parts of the world. Various non-parametric tests, including Kruskal Wallis tests, are done on the data.

15:10-16:25 | Falls Church

Saturday Onsite Presentation Session 4

Instructional Design and Learning Sciences

Session Chair: Jussi Okkonen

15:10-15:35

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.

15:35-16:00

68273 | *Meeting Students Where They Are*

Sara Ratner, University of Sydney, Australia

In 2020, 61 million children of lower secondary school age were recorded as being out of school around the world. When it comes to surveys such as the Programme for International Student Assessment (PISA) that serve to evaluate the success of education systems, this out of school population cannot be ignored (Ward, 2020).

Sustainable Development Goal 4 (quality education) is focused on ensuring that no one is left behind. Globally, we strive to provide a quality education experience for all. For this to be achieved it is imperative that we design assessments that can truly meet the learners where they are. That means not just in terms of their cognitive ability but also in terms of their physical location and level of access considering devices, connectivity and even proximity to a classroom and teacher. If we truly strive to provide a quality education for all we need to serve every child, no matter where they are.

This presentation explores the development of large-scale assessments designed to meet students where they are. It will discuss the logistical complexities as well as the need to develop assessments that meet the needs of all learners at scale. Especially those who cannot be found in traditional schools or classroom contexts.

16:00-16:25

68415 | *Digital Literacy Enhancing Online Teaching in Ghana*

Jussi Okkonen, Tampere University, Finland

From the COVID-19 pandemic experiences, the two Ghanaian universities seek to adopt a hybrid/blended instructional delivery of all its programmes in the post COVID-19 era to provide equal access to high quality education for all students. The benefits of improvement of digital delivery of education extend beyond educational organisations. The use of digital platforms and systems in learning and teaching improves overall digital literacy of the teachers and students. Digitalization is a preferred approach to ensure sustainable growth of education in general and it also enables economic development and creation of new jobs in the field of digital systems and products' creation but also in the field of education. Effective use of digital education tools enables to provide high quality teaching to a large number of students. Based on extensive online assessment of digital literacy of teaching staff in the two Ghanaian universities there were several items to be developed. The presentation discusses academic staffs' lack of competences in technology skills, understanding of it, and knowledge for developing effective online courseware. Moreover, attention is also paid to other facets of digital literacy as digital tuition is not just digitising material and putting it online. The findings and implications are aimed for capacity building in higher education through development of comprehensive digital education delivery strategies, discussing good practises and suggesting new effective practises.



Sunday, April 23

Parallel Sessions

All times are Eastern Daylight Time (UTC-4)

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

09:30-11:10 | Ballston Room

Sunday Onsite Presentation Session 1

STEAM Education

Session Chair: Sheila Tabanli

09:30-09:55

69963 | *Pandemic Pedagogy: Cyberspace as Classroom, Collaboration as Method*

Alain Zedrick Camiling, De La Salle- College of Saint Benilde, Philippines

Magdalena De Leon, De La Salle- College of Saint Benilde, Philippines

The Manila lockdown, one of the longest COVID lockdowns in the world, has forced academic institutions which produce cultural and creative practitioners including the De La Salle- College of Saint Benilde School of Arts, Culture, and Performance (SACP) (now defunct Arts and Culture Cluster from its School of Design and Arts) to recalibrate and rethink their learning and instruction methodologies. SACP has been continually standing at the forefront of creative education in the Philippines through progressive, inclusive, and ethical artistic processes geared towards innovation and inclusion vis-a-vis its bachelor's programs. Through an emic approach both as administrator and lecturer, the study is an in-depth analysis on best practices in online interdisciplinary pedagogy, in the context of teaching arts and culture and its production, including the School's programming and audience development for its participants from diverse localities through a myriad of strategies geared towards sustainable and viable artistic processes in line with their program evaluation report for the past three years. The study reveals that, while the lockdown has restricted the School in mounting their pre-pandemic activities, collaboration has prevailed as a viable method to utilize cyberspace as classroom as they attempt to stay relevant, productive, and sensitive to the needs of the creative sector through a series of dialogues, productions, performances, and conference. It also reveals that there exists an ecosystem of support, comprised of internal and external stakeholders. Initial data for this study was presented online through the International Organisation of Scenographers Theatre Architects and Technicians in 2021.

09:55-10:20

68036 | *The Indigeneity Trend in Philippine Research from 2011 to 2021*

Analiza Resurreccion, De La Salle Lipa, Philippines

Ferillo Demeterio III, De La Salle University, Philippines

This paper looked at the indigeneity trend of the Philippine research outputs, as represented by its top four comprehensive universities, from 2012 to 2021 using the Scopus database. This paper adapted Siddiqi, et al.'s notion of indigeneity in bibliometric analysis that is defined by the domesticity of a given publication's corresponding author and is equated with the rootedness of a given publication on the capacities and concerns of the publication's domicile country and is further equated with such domicile country's potential to compete against the knowledge-based powers of Euro-American countries. Using case study, the researchers looked at the Scopus data of the Philippines' top four. All of these four CUs are located in the National Capital Region. The specific information taken from each Scopus-listed publication are the title, the author/s, the year of publication, and the affiliation/s of the corresponding author/s. Based on the affiliation/s of the corresponding author/s, the domicile country of each publication was identified. The identified domicile country of the corresponding author/s ascertained the publication's indigeneity. With the growth of the numbers of scholars embracing indigenized research in Philippine HEIs, there is an urgent need to mentor and ensure the growth of more Filipino researchers taking leadership in international collaborative projects. In light of the new post-pandemic sustainability agenda, joint efforts are urgently required to develop and implement suitable initiatives to empower Filipino researchers and loop back their findings for policy making and developmental undertakings, to make these knowledge producers truly active agents of change.

10:20-10:45

66967 | *Digital Learning Object Based on Transition Design Methodology to Promote the Energy Efficiency Culture: An Interdisciplinary Development for STEAM Education*

Paola Monet Cañedo-Bobadilla, CETYS Universidad, Mexico

Gloria Janeth Murillo-Aviña, CETYS Universidad, Mexico

Sialia Karina Mellink-Méndez, CETYS Universidad, Mexico

Josue Aaron Lopez-Leyva, CETYS Universidad, Mexico

This paper presents the design, development, and quantitative and qualitative evaluations of a digital learning object based on the Transition Design methodology and the ISO-50001 standard (i.e., Energy Management System). To clarify, Transition Design addresses complex problems, called wicked problems, such as climate change, global pandemic, and lack of access to affordable education, among others. In particular, the problem addressed in this paper is the lack of knowledge of general and standardized aspects related to energy efficiency in the secondary education curriculum design & development in Mexico. Therefore, obtaining good results in the energy efficiency context turns out to be very complicated, since there is no standard framework, and the activities or learning objects used, are not generally appropriate to the expected learning outcomes. In this way, through a social immersion, focus group, creativity techniques, and digital design tools, a market study was carried out considering a sample of 208 students distributed into 6 groups from different subjects, where the subjects are related to natural & exact sciences and social sciences & humanities. The aforementioned is for assessing the student's learning styles to determine the most adequate digital learning object for them. As a result, a digital learning object was developed in an interdisciplinary manner considering the Kolb learning styles., i.e., concrete experience, reflective observation, abstract conceptualization, and active experimentation. Finally, this project has implications for the future development of the secondary education curriculum, but the learning object can also be adapted to existing educational programs and models.

10:45-11:10

70121 | *Tackling the STEM Recruitment & Retention Challenges at a Flagship, Research Institution with an Evidence-Driven, Innovative Hybrid Course*

Sheila Tabanli, Rutgers University, United States

The challenges of recruitment and retention in STEM did not start with the COVID-19 pandemic; however, it still affects the workforce needs of our global world. An innovative hybrid course grounded on research from cognitive science and social emotional learning was designed to address these educational challenges at a flagship, large research university in New Jersey. These challenges disproportionately affect historically marginalized students in STEM fields that further causes diversity & inclusion issues in the workforce. This interdisciplinary course framework is aimed to address (1) the research-to-practice gap between cognitive science research and classroom practices, (2) the perception gap between the instructors and students (expert-to-novice perception gap), (3) the conceptual and procedural gaps in students' learning and studying. Furthermore, authentically designed instructional resources and assessments address students' math mindsets and anxieties by fostering students' sense of belonging in a discipline that disproportionately affects marginalized groups. A case study of the framework for an Introductory Calculus course is shared with the participants to cultivate the integration of research-driven practices into their educational practices. We hope our work will serve as a driving force to promote interdisciplinary discourse and heightened awareness in an area that needs multifaceted approaches to a core issue of our time, namely the ongoing STEM recruitment and retention challenges.

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11:25-12:15 | Ballston Room

Sunday Onsite Presentation Session 2

Learner Experience Design

Session Chair: Sylvie Studente

11:25-11:50

68000 | *Digital Application Literacy and the Modern Classroom Experience*

LeAnne Schmidt, Notre Dame Preparatory and Marist Academy, United States

Pivoting to online learning in a pandemic posed challenges for educators and students. This theoretical exploration examines qualitative research establishing the urgency of teaching not only content but also the applications in which students will be assessed. Critical deficiencies present themselves when students lack familiarity with a new learning platform. The net result is that the assessment fails to capture student learning, but instead assesses basic knowledge and facility with the application for assessment. In this study, learners with familiarity in the use of an application perform 10% better in the short term analysis and 25% better in the long term analysis, despite the fact that material assessed was entirely new content, not a building of incremental understanding toward a content goal. A process of Digital Application Literacy is recommended to assure that assessment results are the product of content learning and not merely savvy use of software. Details are provided for the achievement of Digital Application Literacy through four steps: 1) Elemental explanation; 2) Dialoguing consequences; 3) Low-stakes formatives; and 4) Post-assessment debriefing. Schools experienced significant drawbacks when the shut-down of schools left many students without ways to participate directly in learning activities. Though many schools would pivot to online learning and Zoom classes, these suffered from a lack of preparedness among learners in the new and different styles of digital applications used in remote learning. Clear understanding and utilization of Digital Application Literacy can offer solutions to these circumstances.

11:50-12:15

67410 | *The Use of Chatbots to Support International Students in Higher Education: A Proposed Study*

Sylvie Studente, Regent's University London, United Kingdom

Julia Sargent, The Open University, United Kingdom

A current challenge across the higher education (HE) landscape are increasing drop-out rates and falling levels of student engagement within first year cohorts (Ellis, 2019; Bryson, 2014). In the case of international students studying abroad, increasing drop-out rates are correlated with feelings of "social isolation" (Peel 2000). These feelings are reportedly amplified by issues of cultural adjustment (Erichsen & Bolliger, 2011), and further exacerbated if students experience limited opportunities to receive peer support (Kwon et al, 2010), 1998). When students feel isolated in the transition to university, drop-out rates can increase (Studente, 2021). In response to falling levels of engagement, the use of chatbots in HE is a current research area of interest (Klopfenstein et al, 2017). Educational researchers have reported a number of benefits of chatbot technology; e.g. improving motivation (Fryer & Carpenter, 2006), promoting peer communication (Kowalski et al, 2011), developing learning communities (Alencar & Netto, 2011), improving engagement (Pereira, 2016), and improving retention statistics (Benotti et al, 2014).

This paper presents a proposal for a study which focuses upon the use of chatbot technology to support international students in HE. The scope of the proposed study is two-fold; To investigate how chatbot technology can be used to assist international students with the transition to studying in HE abroad. Secondly, to investigate how chatbot technology can be used to facilitate collaborative learning to reduce feelings of social isolation. The paper will present relevant background literature and outline the proposal for study.

13:15-14:55 | Ballston Room

Sunday Onsite Presentation Session 3

Instructional Design and Learning Sciences

Session Chair: Kriangkrai Vathanalaoha

13:15-13:40

66987 | *Data-driven-Learning: Student-focused Teaching for Learners' Engagement and Performance in Challenging Times*
Andrea Honal, DHBW Mannheim, Germany

In our modern world, much more data are being collected on students than ever before. The rapid technological changes create new chances for educators and students to track their achievements and collect data about educational progress. The large quantity of data being collected forces teachers and faculty staff to think about questions like "How can the data be effectively used to improve the existing curriculum?" and "What can be learned from the data that we have collected?" and "What are the advantages for the learners?". These tracking activities can be defined as learning analytics. It is the measurement, collection, analysis, and reporting of data about learners and their contexts, for understanding and improving learning and the environments in which it occurs. Effective usage of learning analytics helps understand the learning patterns, social and motivational aspects to enhance the students' learning outcomes. Learning analytics is used to predict students' learning process and its intended outcomes providing faculty the feedback towards supporting their academic achievement. In this presentation, educators from Germany will present evidence-based best-practice-cases dealing with the mentioned challenges in the classroom and beyond and explain how learning analytics can be used effectively for learners and teachers. Moreover, different tools and effective approaches will be explained to give students a better learning experience and improve the teaching quality.

13:40-14:05

69979 | *Students' Experience Perception in Courses Taught in New Delivery Modes Compared to Traditional Modes*
Alejandra Yanez, Universidad de Monterrey, Mexico
Teresa Benavides, Universidad de Monterrey, Mexico
Luis Ocegueda, Universidad de Monterrey, Mexico
Zita Lopez, Universidad de Monterrey, Mexico

Even before COVID-19, one of the most important challenges that Higher Education faces today, is the need for innovative educational methodologies and flexibility. We could all agree that one of the objectives of Higher Education is to provide students with a variety of intellectual and practical skills that, at the same time, will help them develop competitive advantages such as adaptation and critical thinking. Universities should encourage students to be engaged students and lifelong learners questioning the status quo with the goal of changing it. New technologies and different teaching methodologies have to be implemented in order to reach that outcome. Among the strategic objectives of Universidad de Monterrey (UEM) has been to provide flexibility and satisfaction to students in the delivery modes of the academic offer. UEM implemented a methodology that combines face to face with synchronous and asynchronous as delivery modes.

In this study, the experience of 185 students during courses implemented in new delivery mode was compared with 115 students in courses with traditional delivery modes. Students chose openly either way freely. After the experiences lived in 2020 and 2021, one can think that the face to face (traditional) delivery mode would be the one chosen by students. The results obtained in this study reveal that both delivery modes satisfy students and favor their learning process. The combination of delivery modes provides flexibility, so the proposal is that universities can include them in their academic offer as a response to the current student's learning interests and needs.

14:05-14:30

67002 | *EFL Material Development and Evaluation: A Systematic Framework*
Yazan Brahim, Sultan Qaboos University, Oman

In this presentation, I will introduce and explain the various factors and procedures involved in the process of EFL material development and EFL coursebook evaluation, including the principled creation of intended learning outcomes and various materials effectiveness evaluation. First I will account for the principles and procedures followed in the design and development of materials and the various types of effectiveness evaluations of these materials pre, whilst and post using them in class. Then I will start by explaining the principled creation of criteria to evaluate the suitability of a commercial or in-house coursebook for a particular target group. Finally, I will wrap up the workshop by a summary of practical guidelines for best practice, followed by Q and A.

14:30-14:55

68860 | *Educational Policies and English Language Teaching at the Tertiary Level in the Capital of Thailand: A Knowledge, Attitudes, and Practices (KAP) Study*
Kriangkrai Vathanalaoha, Thammasat University, Thailand

In the realm between the pandemic and the post-pandemic situation, it drives the policy makers to reshape educational directions in higher education in Thailand. This study examines the tension between the students' and educators' perception at one public university in Bangkok, as this may reflect how the educational policy has been operated in the capital city. The questionnaires, including 19 questions exploring three perspectives: knowledge, attitudes, and practices (KAP), were collected from 44 undergraduate students, majoring in English language and literature and also collected from 24 lecturers who had at least five-year experience in English language teaching (ELT) at the university level. In addition to the quantitative analysis from the collected data, the qualitative analysis was based on the three students' semi-structured interviews, compared with the interviews given by the three lecturers whose number of experiences in ELT ranges from five to 15 years. The results revealed that there were differing levels of awareness and practices in terms of digital disruption between the two groups as the lecturers tended to lack integration or misinterpretation of technology in the classrooms, specifically massive online open courses (MOOC) and e-portfolio. Moreover, they inclined to exclude the authenticity of learning and rather focused more on theoretical lessons during the pandemic. This research implies that the students appear to be more adaptive to any alternative educational policy and their educational practices are indifferent or less challenging with or without the pandemic.

09:30-10:45 | Falls Church

Sunday Onsite Presentation Session 1

Emerging Philosophical Perspectives on Learning & Education

Session Chair: Susan Lohret

09:30-09:55

69813 | *How Highly Achieved Students Differ from the Others? A Text-mining Approach to Personal Learning Goals*

Hilary K. Y. Ng, Hong Kong Metropolitan University, Hong Kong

Lester C. H. Chan, Hong Kong University of Science and Technology, Hong Kong

People often set goals at the start of a new event in their life. Goals are related to performance across different domains, including sports, psychotherapy, leadership, health care, as well as education. Those students who set learning goals are found to have higher learning motivation, more persistence in learning, better course attendance, and better academic performance than their counterparts. Previous studies showed students benefited most from setting specific, challenging, measurable, and achievable learning goals than their counterparts did. While goal-setting activity appears to be an effective and inexpensive way to enhance learning performance, how learning goals vary as a function of students' course grades remains under-explored. Rather than classifying students' learning goals into pre-established categories for summative investigation, this research adopts a text-mining approach to examine the underlying similarities and differences directly. We have invited 192 university students to set three different learning goals at the beginning of a semester. Results from 552 valid responses indicated that highly achieved students differ from their counterparts in terms of the clarity of expression, the usage, and the characteristics of words used in setting their personal goals. In general, these students expressed themselves with more clarity, more purpose-driven, and more variety of words, which provides an opportunity for us to learn from the highly achieved students. Other theoretical advances and practical advances in education, teaching and learning will also be discussed.

09:55-10:20

66981 | *SCREAM Strategy for Alleviating Teacher's Stress Levels in Higher Education*

Marine Milad, Arab Open University, Kuwait

Hiba Tayara, Australian University, Kuwait

Mohammed Farran, Arab Open University, Kuwait

In the past two years and especially during the pandemic, many instructors have been facing innumerable stress-related incidents due to the ongoing pandemic starting from teaching online to achieving the intended learning outcomes. As a result, teachers have had to continue their job amid a series of circumstances and stressors that may have had a toll on their mental health state (Andrade, Bosano & Paz, 2021). This paper confers a new strategy that could potentially help reduce stress in classrooms. Thus, two tools were designed to collect data. The first one was an observation checklist which was designed to record instructor's reaction towards the new and unfamiliar reality of virtual teaching. The second tool was a questionnaire that was designed to collect data related to stressful situations in the ESL classrooms. The data collected helped in forming a new strategy to meet the dire needs for coping with the pandemic and enhancing teacher's performance. The suggested SCREAM strategy aims at alleviating the numerous stress-related incidents that have been plaguing instructors and draining their efforts in the ESL classrooms since the beginning of the pandemic. The SCREAM strategy stands for Survive (S), Change (C), Reflect (R), Execute (E), Admire (A) and Maintain (M). This strategy could possibly help ESL instructors and attendees to recognize some of the online challenges they have been through and empower them to better realize their potential and improve their performance in the workplace.

10:20-10:45

68068 | *A Framework for Moving Beyond Awareness: How District and School Level Leaders Address Implicit Bias Through a Professional Learning Community*

Susan Lohret, St John Fisher College, United States

The presentation includes findings and recommendations that support school building and district-level leaders in addressing implicit bias within a professional learning community model. The descriptive phenomenological design explores the phenomenon of addressing implicit bias and examines the lived experiences of educational leaders through their reflections. Participants included the following criteria: a) professionals with district-level leadership or school building leadership in New York State public schools and b) participation in addressing implicit bias through a formal program, curriculum, initiative, or informal structure. Focus group and semi-structured interviews were conducted and data collection tools were field tested. Data was transcribed, coded, and analyzed using thematic analysis. A system of member checking was implemented with semi-structured transcripts. Four categories emerged and further expanded into 11 themes including: (a) responsibility and commitment, (b) safety and trust, (c) leadership support and approach, (d) readiness versus urgency, (e) staying on the path, (f) community as strength, (g) multi-tiered, (h) key role (s) and student voice, (i) are we there yet?, (j) modeling and dialogue, and (k) action and entry points. Recommendations include areas of future research, policy, and professional practice. Attendees will be introduced to a framework for addressing implicit bias framed as perspectives. Attendees will engage in a workshop-style presentation providing opportunity to reflect on their own leadership practices. The timeliness of the study fills the gap of educational research in addressing the phenomenon of implicit bias in public schools, and reinforces awareness is not enough to address implicit bias.

11:25-12:15 | Falls Church

Sunday Onsite Presentation Session 2

International Education

Workshop Session

11:25-12:15

69962 | *Organizational Change Post-COVID-19: Adapting Kotter's Eight-step Model Related to Vision Statements and Communication to Signal Social and Economic Progress*

Kate Montgomery, Southern Methodist University, United States

Miami of Ohio University President from the United States, Gregory Crawford (Forbes, 2022), claims that “the national reckoning on race amid the pandemic, climate change, wealth inequality, globalization and accelerating technology, among other things, have elevated expectations that organizations will take a stand on such issues as social justice, racial equity and environmental sustainability” in his Forbes magazine article, “An Organizational Vision And Mission For A New World And Workplace: Part 1”. The global pandemic created systemic change in many aspects of society at large. This workshop provides participants a hands-on workshop to examine John Kotter’s seminal work in organizational change related to external forces like COVID-19 and his eight-step model for change with particular focus on vision and communication that impact organizational culture. The vision/mission statements for three universities from Europe, the United States, and Asia will be reviewed pre- and post-COVID-19 to illuminate varying responses to the global pandemic. Participants will then discuss how Kotter’s organizational change model may be adapted for higher education and attendees’ specific institutions.

13:15-14:55 | Falls Church

Sunday Onsite Presentation Session 3

Experiential Learning

Session Chair: Emil Velinov

13:15-13:40

69997 | *The Impact of Students' Cross-cultural Differences on Global Virtual Teams Engagement*

Emil Velinov, Škoda Auto University, Czech Republic

Juergen Bleicher, Duale Hochschule Baden-Wuerttemberg (DHBW), Germany

The paper focuses on the study of the emerging cross-cultural specifics of undergraduate and graduate students from five different business schools. The study aims to examine the impact of these cultural differences on the commitment of global virtual teams by investigating the students' perception of global virtual teamwork in courses related to International Business and International Management. The study covers a comprehensive dataset collected over the period of 2019-2022, which includes students from five different business schools. The results of the study indicate that cross-cultural differences, such as national cultural values, individual biases, ethical aspects, and other factors, play a significant role in affecting the students' motivation and commitment to completing tasks and assignments within the global virtual teams across the selected business schools. The paper sheds light on the importance of understanding the cross-cultural specifics of students in global virtual teams and how these differences can impact their commitment and motivation. The results of the study can help educators and businesses in developing strategies to manage and overcome cultural differences in virtual teams, ensuring their success and effectiveness in a global context.

13:40-14:05

68678 | *The Impact of Teaching Lexical Bundles on the Improvement of the Writing Skill of Freshman TESOL Students*

Sally Kondos, American University in Dubai, United Arab Emirates

This presentation introduces the outcome of an experimental study that investigated the impact of teaching lexical bundles on improving the writing quality of Freshman students. The presenter will give a detailed account of the research methodology, theoretical framework, and the research methods implemented in the study. Many studies investigated the relationship between competence in vocabulary and L2 writing. Although studies indicate the importance of lexical knowledge in L2 writing, more research must be conducted to confirm the correlation between specific vocabulary size and the quality of writing (Miralpex & Muncoz, 2018). Additionally, there is a lack of research investigating the effect of teaching lexical bundles on enhancing Arabic-speaking students' language proficiency in the United Arab Emirates or the Middle East. The current study implemented referential and stance lexical bundles due to their vital role in producing more advanced sentence structure, yet it is challenging to master for L2 language learners correctly. Collocation is perceived as a continuum governed by some degree of restrictions. Lexical bundles refer to high-frequency combinations of words that frequently occur next to each other, whether in spoken or written text. Lexical bundles are incomplete grammatical structures that combine two noun phrases or a verb and a noun phrase or more phrases or clauses. The presenter will share the experimental study results and the type of lexical bundles that contributed to the enhancement of the writing skill of the study participants with the audience and the answers to the research questions.

14:05-14:30

69587 | *Transforming Undergraduate Research Experiences with Experiential Learning*

Rachel Burcin, Carnegie Mellon University, United States

Vishwas Mruthyunjaya, Megagon Labs, United States

John Dolan, Carnegie Mellon University, United States

Science and technology drive innovation, create economic opportunity, and are critical to national security. With increased competition globally for a skilled STEM workforce coupled with high barriers to participation in STEM, the missing millions, and the longstanding underrepresentation of some US communities, collective action is urgently needed to expand STEM education and training to meet critical workforce demands. Undergraduate research experiences, long recognized as a high-impact education practice, are critical to growing the nation's research and scientific community. However, the traditional bounded 10-week summer research model may artificially reduce the impact and outcomes for participating students, faculty, and organizations. In 2006, Carnegie Mellon University's Robotics Institute launched a summer undergraduate research program that is constantly transforming into a global learning community that helps scholars to embark on a journey to find their space within robotics. Nearly 80% of our participating students attend graduate programs in STEM, and 95% are ultimately a part of the STEM workforce.

In this paper, we will:

- Discuss how David Kolb's Experiential Learning Theory informs our student experience design - Scholars explore the nature of research (discovery, collaboration, iteration), gain exposure to multiple robotic domains, engage in service learning, discuss policies with political and community leaders, and present and publish their research results.
- Demonstrate how the four stages of experiential learning (concrete learning, reflective observation, abstract conceptualization, and active experimentation) and learning styles are helping us create more effective communicating research modules.
- Share a toolkit for launching an undergraduate research working papers journal.

14:30-14:55

66977 | *Teachers' Voice About Virtual Reality in the Language Class*

Jacqueline Zammit, University of Malta, Malta

Virtual reality (VR) technology is growing in popularity, but little is known about the potential use of VR tools in the teaching of Maltese. The current study investigated this topic using a mixed research style. The qualitative approach and a focus group technique were used to collect information about the use of VR in language learning settings from 25 teachers. The quantitative part of the study involves conducting an online survey among the same participants to collect information on the potential effectiveness of VR technology in the Maltese environment. The study's conclusions offer insight on how well virtual reality may be used to teach and learn Maltese as a second language. Based on the findings of the NVivo thematic analysis and the quantitative information collected by employing the survey approach, the study provides a thorough assessment of the benefits and drawbacks of VR for international students learning Maltese. Teachers applaud VR for immersing students in a rich learning environment and enhancing it with essential entertainment aspects. This study shows that VR technologies are not currently being used to assist learners in learning Maltese, and there is still a lot of confusion over the norms that should guide their use in ML2 environments. The most significant components of this ambiguity will be critically discussed in this presentation, along with a variety of VR-related difficulties such as high costs, bulky headsets, and technological difficulties.



Monday, April 24

Online Parallel Sessions

All times are Eastern Daylight Time (UTC-4)

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

08:00-09:40 | Room A

Monday Online Presentation Session 1

Enhancing Access to Education

Session Chair: Hellen Agumba

08:00-08:25

65534 | *Designing Outdoor Community Learning: Early Educators' Barriers, Extension, and Incorporation of Technology*
Siew Chin Ng, University of Melbourne, Australia

Differing opportunities for outdoor teaching and learning for educators and young children exist globally as urbanised countries do not have accessibility to extensive natural spaces and resources. A rich resource which urbanised landscapes might consider are the community facilities and settings which Chaudhury et al. (2015) described as public open spaces including parks, green spaces, sidewalks, plazas, playgrounds, shopping malls and community centres. These spaces are easily accessible to the public and allow for varied uses for individuals and groups, which can foster the engagement of public in the neighbourhood community environment and in turn support social connectedness within the community members (Lachowycz & Jones, 2013). These learning opportunities and connections in the outdoors could be influenced by aspects related to beliefs, practices and barriers (e.g., Ernst, 2014), as well as educators' own outdoor experiences (e.g., Bilton, 2020). With a focus on exploring urbanized landscapes, this qualitative study reports findings based on pedagogical conversations from six early educators of children in six Kindergarten (five- to six-year-olds) classrooms across four preschools in Singapore. Preliminary analyses reveal that educators perceived lack of contextualized information and parents' expectations amongst some of the barriers faced when designing outdoor community learning. Content analysis is being conducted to illustrate educators' extension of outdoor experiences into indoor classrooms, as well as incorporation of technology in the design of outdoor community learning experiences. The findings contribute to the understanding of designing outdoor community learning in urbanized places.

08:25-08:50

69611 | *Drop-out Determinants that Influence the Out-of-School Youth in Iligan City and Lanao Del Norte*
Christopher Dumadag, Mindanao State University-iligan Institute of Technology, Philippines
Adelfa Silor, Mindanao State University-iligan Institute of Technology, Philippines
Gemma Grace Capuno, Mindanao State University-iligan Institute of Technology, Philippines
Sigritch Cortez-David, Mindanao State University-iligan Institute of Technology, Philippines

Many researchers have conducted several studies to determine why students stop schooling. Although there are multiple reasons why students leave school, each student's situation may be unique in every place. This study aimed to investigate the dropout determinants that influence out-of-school youth in Iligan City and Lanao Del Norte. Purposive sampling was used, with an emphasis on Out-of-School Youth. Two hundred (200) out-of-school youth from Iligan City and Lanao del Norte were the participants of this study. The researchers used a Likert Type item questionnaire to collect the data. In addition, the researcher used descriptive analysis to calculate the median and frequency. The results found that among the identified factors, the respondents agreed that academic experience, especially boredom in the classroom, was the leading dropout determinant influencing the Out of School Youth. The other factor was family financial support, wherein students left school because they could not buy complete requirements in school. The study recommends that government, non-government organizations, and all stakeholders not only focus on providing financial assistance to students but also consider the students' learning experience inside the classroom. Academic boredom is a serious issue that needs immediate solutions.

08:50-09:15

69630 | *School for Social Justice. Pedagogical Reflections on Equity in Education in Gramscian Perspective With a Focus on the Italian Context*
Valerio Ferrero, University of Turin, Italy

The role of school for social justice is supported internationally (Connel, 1993; Hytten & Bettez, 2011; Pearson & Reddy, 2021): everyone must be included in democratic participatory processes (Bauman & Tester, 2002; Gerwitz, 2006) and have the cultural and political tools to change History (Bell, 2007; Hackman, 2005). Taking equity in education (Rawls, 1972; Nussbaum, 2013; Sen, 2009; Kanor, 2021) as a horizon of pedagogical meaning means ensuring excellence for all and the acquisition of the capabilities to exercise citizenship. Focusing our analysis on the Italian context, old and new inequalities reverberate on students' educational pathways (OECD, 2022; INVALSI, 2022). Social reproduction is still active, but non-traditional factors of inequality emerge (Ferrer-Esteban, 2011; Ferrero, 2022; Granata & Ferrero, 2022): they are produced by school culture and the structure of the school system and cause unprecedented forms of injustice. Re-reading the challenges of this context through the philosophical work of Antonio Gramsci (1919; 1975; 1996; 2022) is useful to give depth to the reflection, given the topicality of his thought: schooling should not crystallize social differences but be a vector of emancipation to guarantee people equal cultural and political dignity. Schooling make it possible to transcend forms of subalternity and hegemony, even those that are presented as traditional and therefore socially accepted: it is necessary to make people aware that there is nothing natural or predetermined about social organization, that it is possible to unhook existing relations of dominance and power in favor of a more democratic and fair social order.

09:15-09:40

69735 | *Impact of Rurality on Student Subjectivities and Positionings in Higher Education: A Social Justice Dimension in South Africa*
Hellen Agumba, University of Johannesburg, South Africa

As social inequities are compounded by knowledge inequity, there is need to reconsider how higher education privileges some and excludes others. This paper reports on a study that was conducted to examine rural students' pathways with reference to their experiences of entering and progressing through higher education in South Africa. Nancy Fraser's notion of social justice is key to understanding how education can be empowering to some while disempowering others. Qualitative methodology informed this study. To collect data, I first analyzed twenty-four digital documentaries. To gain more depth and insight and for triangulation purposes, I conducted eighteen semi-structured interviews as well as two focus groups. The findings reveal the profound inequalities that these students experienced in attaining higher education. This study seeks to contribute to knowledge and theory development in research on educational equality and social justice in addition to providing insights that may inform policy making with the aim of improving the trajectory for rural students in higher education.

09:55-11:35 | Room A

Monday Online Presentation Session 2

Higher Education

Session Chair: Ziningi Nobuhle Jaya

09:55-10:20

69739 | *Master Students' Improvement in Information Literacy through Online Instruction*

Esther Argelagós, Universidad Internacional de La Rioja / Universitat de Girona, Spain

Consuelo García, Universidad Internacional de Valencia, Spain

Jesús Privado, Universidad Complutense de Madrid, Spain

The ability to manage information from the Internet with learning purposes represents a hard task to most of the students, even in higher education, in which this ability acquires the hue of performing an academic text. The Information Problem Solving (IPS) model unpacks this ability into five different skills: defining research questions, planning search activities, processing the information found, and organize and presenting information. In this study, an IPS instruction was designed, implemented, and evaluated in order to train master students to accomplish a literature review task and write their final thesis. Since the university where this instruction took place was completely virtual, the instruction was also online. In addition, this pilot course was based in the Four-Component Instructional Design (4C/ID) model, which consider essential the following components: learning tasks, supportive information, procedural information, and task practice. Twenty-five master students participated in the whole two-month course and fifty-five ones acted as a control group. The findings of this quasi-experimental study indicate that, after the instruction, trained students group obtained statistically better results in activities involving the following skills: defining initial questions, planning and searching in the Internet or other sources, and processing sources and material found. Regarding the skill to organize and present information, no differences were obtained between the two groups, which led us to a deep analysis to unravel the points that might be enhanced during the design and implementation of this instruction. Nevertheless, the online course showed to be an excellent tool to improve students' IPS skills.

10:20-10:45

69785 | *Double Didactics Design to Prepare Future Educators*

Judith Hanke, University of Flensburg, Germany

Teachers are often not very familiar with reading strategies and methods. Therefore, students do not know what reading strategies are and how to apply them. However, they benefit greatly when using them as they foster reading competency. I teach a class for university students, who want to become teachers or work in the educational sector. The class's focus is reading support in which reading strategies and methods are incorporated. One important focus is the content. The first sessions of the class are destined to give the students an overview of the definition of reading, reading models, their own reading history, etc. The second target of the class is the student-centered learning approach in the form of a double didactics design. After we covered the basics, I prototype a "group of experts," which is a student-led activity. A group of experts, composed of students, do research and teach the given topic. The students need to plan "their lesson" by selecting appropriate reading material and determining methods. This means that the student-centered learning approach puts the students in the position of the teacher, by having them teach their fellow students. A discussion follows after each session, in which the implementation of the reading strategy and reading methods applied are discussed. This intends that the students do not just give a regular presentation, but that they acquire knowledge, skills, and experience on how to actually implement reading strategies and reading methods in their future classroom. The presentation will explain the course design.

10:45-11:10

68583 | *Dissertation Assessment: Reflections of a Novice Examiner at a University of Technology*

Ziningi Jaya, Mangosuthu University of Technology, South Africa

In spite of its crucial role, the topic of assessment remains a source of contention within the education community. Differing assessment practices by different practitioners makes assessments unreliable. Assessment inconsistencies also exist in higher education where academics and industry professionals are responsible for assessing research dissertations. The main objectives of the current reflective study are to improve my assessment practices by critiquing a dissertation examination tool and making recommendations based on my personal experience. In trying to investigate dissertation examination practices, only limited recorded information was found on this topic. Therefore, since the assessment tool provided did not detail all assessment criteria for the dissertations, knowledge had to be drawn from personal past experience as a research student. This enabled the identification of key features for a good dissertation and to guide how dissertations should be examined. Not being an expert in all the dissertation topics caused much fear and doubt when examining them. Based on this, expert advice and guidance from colleagues was sought out. Considering all of this evidence, it has become clear that training of novice examiners is essential. An assessment rubric with an unambiguous detailed guiding criteria should be developed and standardized for assessment practices to be standardized across the department.

11:10-11:35

69629 | *Rethinking Pedagogy for Teaching Finance Subjects in Higher Education*

Kwang-Jing Yii, Swinburne University of Technology Sarawak Campus, Malaysia

The students' anxiety about studying finance subjects was the most difficult challenge due to their diverse cultures, qualifications, and discipline areas. Students are apprehensive about studying finance subjects because of the broad concept, technical application and complex decision-making. Finance anxiety causes inappropriate and ineffective learning behaviour, result in failing grades and study extensions. Most students become easily bored, disinterested and disengaged in their learning when they are exposed to one-way interactive teaching practice. This study develops the Teach-Exhibit-Practice-Evaluate-Reward (TEPER) pedagogy by integrating the Connectivism Learning Theory, Constructivism Learning Theory, and Behaviourism Learning Theory. The TEPER pedagogy incorporates digital technology to create an innovative learning and teaching environment that effectively transforms students' passive learning behaviour into more active engagement. It is hoped that this study will advocate for a rethinking of university teaching and learning in finance subjects in order to prepare students to become future-ready learners with strong industry engagement in a tech-rich future.

08:00-09:40 | Room B

Monday Online Presentation Session 1

Learning Experiences

Session Chair: Cheng Gong

08:00-08:25

68619 | *The Use of Mathematics Modules in Supporting Self-Regulation Among Junior High School Students in a Flexible Online Learning Environment*

Rio Jane Diaz, San Beda University & University of Santo Tomas, Philippines

Evelyn Songco, University of Santo Tomas, Philippines

Examining how students manage their learning through the mathematics modules in a flexible online learning setup can help educators plan and implement a curriculum in this environment. Hence, this study aims to assess the use of mathematics modules in supporting students' self-regulation in a flexible online learning environment. This study utilized an explanatory sequential mixed methods design. The Online Self-Regulated Learning Questionnaire (OSLQ) evaluated the students' self-regulation. After analyzing the results from the OSLQ, focus group discussions, and individual interviews were conducted. The results showed a significant difference between students in grades 7 and 10 in terms of self-regulation. The study discovered that JHS students "often" use environment structuring, goal setting, time management, and self-evaluation strategies. However, they rated themselves "sometimes" in using help-seeking and task strategies. Findings from the focus group discussion and interviews revealed that different features of the math modules, such as the module planner, pre-test, list of most essential competencies, module activities, answer key, and self-check activities, allowed the JHS students to engage in forethought, performance, and self-reflection phases of self-regulation. However, challenges in using the modules emerged, such as heavy workload, the irrelevance of activities, student attitudes, and teacher factors. Overall, the students and teachers have positive experiences using mathematics modules. The research findings could be used to improve schools' existing programs and establish best practices for using modules in a flexible online learning environment.

08:25-08:50

69826 | *Developing Probabilistic Intuitive-Thinking Using Discovery and Reflective Teaching-based Approaches*

Kier Baugbog, Ateneo de Manila University, Philippines

Catherine Vistro-Yu, Ateneo de Manila University, Philippines

This study determined the mechanisms pupils' employ in judging probabilistic situations using their intuition and the effect of using discovery and reflective teaching-based approaches in developing pupils' probabilistic intuitive thinking, prior to their learning of basic probability concepts. Discovery and reflective teaching-based approaches refer to a teaching strategy that is centered on activities where students are presented with situations that require them to judge probabilistic situations using their initial thinking (labeled as intuition in this study), analyzing and investigating their intuition, and reflecting on their judgments. The participants were from two randomly selected sections of 5th and 6th grade pupils in a public elementary school in the 1st Congressional District of Valenzuela City, Philippines. Two instruments were used: (1) a problem set adapted from the study of Fishbein and Gazit (1954) and (2) an unstructured interview. A mixed methods design was utilized in the analysis of data. Chi-square test of goodness of fit was used to analyze the frequency of correct responses in the pretest and posttest of the adapted problem set while thematic analysis was employed in analyzing the interview transcripts. Results showed that there is a significant difference between the frequency of correct responses in the pretest and posttest for both fifth and sixth grade students. This implies that discovery and reflective teaching-based approaches were effective in developing pupils' probabilistic intuitive thinking. Additionally, thematic analysis revealed that pupils rely on past experiences particularly experiences that involve playing games in judging probabilistic situations.

08:50-09:15

67637 | *Pedagogical Limitations and Its Countermeasures of the Six W Method in Writing*

Cheng Gong, Singapore Centre for Chinese Language, Nanyang Technological University, Singapore

Juan Wang, Singapore Centre for Chinese Language, Nanyang Technological University, Singapore

Boonpei Tay, Singapore Centre for Chinese Language, Nanyang Technological University, Singapore

The Six W Method, also known as the Six W Analysis or 5W1H, is the Who, What, When, Where, Why and How. It helps students to identify the main information of a text in an organized and sequential manner, and is often used in reading instruction to help students sort out the storyline. In writing, teachers also use the 5W1H to guide students through the content-conceptualizing process, to outline their writing. However, it actually has its pedagogical limitations in writing instructions. When the students try to outline their writing, it seems that the Six W Method could not help them much. Why? Unlike reading, which is a receptive learning process, writing is a productive learning process. During the process of outlining before writing, the 5W1H information that the students choose is only a RESULT and ways of presenting of their selections, not a METHOD of selecting material. As for how to select materials, i.e., how to determine the information in the 5W1H, and why to determine this information instead of that information in each W/H, this is where students need special coaching and training from teachers. This process of thinking is less visibly and explicitly trained in the classroom. In this paper, we try to analyse the limitations and shortcomings of the Six W Method in the teaching of writing from the perspective of thinking process, and try to propose corresponding countermeasures to help students how to use the Six W Method for optimal material selection.

09:15-09:40

66980 | *The Nature of Math Anxiety Among Students in Middle and Secondary Schools in Qatar*

Ahmed Megreya, Qatar University, Qatar

Ahmed Al-Emadi, Qatar University, Qatar

Ahmed Moustafa, Bond University, Australia

Background: This study examined the psychometric properties (factor structure, convergent and criterion validity, inter-correlations, and reliabilities) of an Arabic version of the modified-Abbreviated Math Anxiety Scale (m-AMAS) and gender differences in math anxiety in an Arabic speaking Middle Eastern country, Qatar. Methods: A large sample of students in grade 7 to 10 (N= 731) completed the m-AMAS, three different scales to measure science anxiety, test anxiety, and general anxiety, as well as a scholastic math achievement test. Results: The two-factor structure of the m-AMAS was confirmed, with good to adequate reliabilities, and its compositional measurement invariance was established across girls and boys in the four grades. In addition, math anxiety correlated positively with science anxiety, test anxiety, and general anxiety. Regression analyses showed that math anxiety was negatively associated with math achievement, even when test anxiety, science anxiety, and general anxiety were considered. Furthermore, girls showed higher math anxiety than boys. Conclusions: These adequate psychometric properties of the Arabic m-AMAS suggest that the construct of math anxiety has a cross-cultural similarity.

09:55-11:35 | Room B

Monday Online Presentation Session 2

Culture and Arts-based Education

Session Chair: Haisang Javanalikhikara

09:55-10:20

68709 | *Creativity at School: An Analysis of Pedagogical Proposals in the Early Years of Elementary School*
Mindla Monica Wrencher Fleider, Pontifícia Universidade Católica de São Paulo, Brazil

The research investigated creativity in the school setting, specifically during the early years of elementary education. It focused on teaching for creativity through the teacher's actions to stimulate student participation in creative processes, assuming that creativity is an innate ability that can be developed by all. This study investigated how teaching for creativity and stimulating creative thinking has been approached as pedagogical practice in a private school in Sao Paulo (Brazil) through the analysis of activity plans designed by multidisciplinary teachers who teach in the early grades of elementary school, as well as the ways these teachers conceive teaching for creativity. A qualitative methodology was employed – the examination of didactic plans, content and activities enabled the analysis of proposals that foster teaching for creativity. Data revealed that such practice is circumstantial and dependent on the teacher's knowledge and availability, meaning that it is utilized in specific contexts. The conclusion is that teaching for creativity shows up timidly in activity planning and that the varying understanding of creativity among teachers influences the way they foster and enable creative thinking opportunities. Additionally, teacher planning does not necessarily articulate what takes place in the classroom, creating a fragile environment for teaching for creativity. There are several possible settings that enable the development of creative thinking in the classroom, however, these are not always prioritized in the activity plans analyzed.

10:20-10:45

67966 | *Visual Culture & Meta-Cognition: An Investigation of Cognitive Patterns While Building Collective Knowledge*
Aatiqa Sheikh, Beaconhouse National University, Pakistan
Mariya Sajjad, Learning Institute-Lahore University of Management Sciences, Pakistan

This visual research is based on the idea of social knowledge, which aims to understand participants' meta-cognitive responses through the meaning that is attributed to the image based on their personal experiences. In context of making meanings from an image and situational context the significance of a wider reception of interpretation and perception is kept in view. It is so, in order to critique and draw out connections between cognitive pattern and social behaviour towards cultural familiarity and beliefs and therefore community building. The selection of the images for photo elicitation in this research is based on elements that construct urban visual culture and virtual environment, which inextricably is bound to regulate thinking biases and behaviours of consumption. Another strand to this is the heuristic underpinnings in the research that reflects on the act of conducting an activity to understand a process, which constructs the identities and beliefs of participants. This activity encapsulates the symbiotic relationship between image, text and mind while implied as a socially creative act. Hence, intra-personal and interpersonal forms of dialogue to facilitate critical inquiry and collective meaning making.

10:45-11:10

69713 | *Understanding of Western Art History from Films*
Haisang Javanalikhikara, Chulalongkorn University, Thailand

From a personal experience on teaching art history, researcher found that in order for learners to understand overall context of art history, one must understand general information such as artists' biographies, artistic style, formation of artistic idea, together with other surroundings to integrate understandings. Contexts regarding society, government, religion, belief, social value, economic and culture are all very crucial but most learners tend to get lost focus when it came to these aspects. Art history is a subject where the cognitive process involves remembering through understanding. For learner to evaluate tangibly, one needs to connect various dimensions which effect artist; evident, situation, atmosphere, and such. Lack of understanding surrounded context tends to fails recollection on the subject matters. Nowadays, there are various multimedia available to mass audience that potentially help filling in the understanding of art history. This hypothesis is a key for this research to propose approach of understand art history through films.

11:10-11:35

69902 | *Developing Human-Rights Based Peacebuilding Through Global Dialogues: Time-Tested Principles for International Video-conference Education*
Katherine Tyson McCrea, Loyola University Chicago, United States
Jonas Ruskus, Vytautas Magnus University, Lithuania

International education provides an invaluable opportunity to prepare students for international competence in a globalized future, yet pedagogical frameworks for video-conference education need further conceptualization. This presentation describes educational content and process principles for international video-conference education developed over 16 years of international teaching of global social work with students representing over 30 countries. Based in an international partnership between faculty from universities in the U.S. and Lithuania, the educational content discussed will be interdisciplinary human rights principles and peace-building intervention strategies applied at international, national, community, and family levels. Learning focuses on developing students' intellectual knowledge of interventions in diverse cultural and social systems contexts, and increasing students' capacity for empathic availability to persons with very different values and social contexts. Examples of the content taught include: • internet-based public health education and advocacy, • arts-based programming with children from subcultures traumatized by civil strife, • trauma-focused projects of national reconciliation and community and familial healing, and • interventions to reduce marginalization and stigma and promote societal participation with persons in poverty, persons currently or formerly incarcerated, and persons with disabilities.

Educational processes stimulate student communication to optimize their learning from each other about diverse societies, cultures, and strategies for peace-building. Specific strategies described include: • Group presentations and student-authored "ted talks" about global social work practices, • Sharing specific cultural practices, • Breakout groups to develop critical thinking skills and empathy, • Strategies of participation to build ecological validity of knowledge, advance community capacity and intervention effectiveness.

08:00-09:40 | Room C

Monday Online Presentation Session 1

Learner Experience Design

Session Chair: Tingjia Wang

08:00-08:25

69980 | *Students' Readiness in Contextual PISA-Like Items: A Focus on Procedural Fluency and Adaptive Reasoning*

Donna Bautista, Ateneo de Manila University, Philippines

Catherine Vistro-Yu, Ateneo de Manila University, Philippines

As part of the Updated Philippine Development Plan, the Philippines participated for the first time in Program for International Student Assessment in 2018. The Philippines ranked 78 in mathematics out of the 79 participating countries. This study was conceived to help mathematics educators understand the poor performance of Filipino students. In particular, it aimed to investigate students' procedural fluency and adaptive reasoning when solving computational items, simple context items, and PISA-like items. The ultimate goal was to investigate whether context might be a primary reason for their performance on PISA-like items. Both context familiarity and context complexity were the key objects of investigation. Mixed methods research design was employed in this study. Eighty randomly selected Grade 9 students took three sets of test materials namely: computational items, simple context items, and PISA-like items. It was found that there is a significant difference in procedural fluency and adaptive reasoning across the three item types. Tukey's HSD Post Hoc Analysis revealed that students' procedural fluency and adaptive reasoning were significantly different between computational items and PISA-like items. A checklist on context familiarity and interviews conducted after the testing revealed that familiarity of context does not improve students' performance in PISA-like items. Context complexity, however, affects students' performance in PISA-like items. It can be concluded that Filipino students are not ready for contextual PISA items. This study advocates further research on PISA-like items intertwined with other strands of mathematical proficiency.

08:25-08:50

66984 | *Diligence in Accomplishing Assignments and Activities in the LMS in the Contexts of Grade 9 Students in Economics*

Gregorio Sismondo, Holy Trinity Academy, Philippines

Pandemic compelled schools to provide delivery of learning in a more flexible manner and Holy Trinity Academy were among the schools provided this through fully online learning and home-based learning modalities. Despite the flexibility it provided, some students still failed to submit their assignments and activities in the LMS. Because of this alarming situation, the researcher was motivated to conduct this action research. This was conducted during the school year 2021-2022. Twenty-three students were purposively selected and descriptive phenomenology was used. Responses of the student were derived using a questionnaire sent to them through the google form. Open-minded reading was used to derive meanings and themes. Based on the findings, distractions, lack of time, and stress were the factors identified by the students affecting their diligence which are classified under environmental conditions, time, and emotional conditions. Furthermore, they believed that promptness, initiative in answering and submitting the activities, a positive mindset, and proper management of time are helpful in their diligence. Finally, they recommended lessening the activities in the modules, providing enough reminders, giving clear instructions, expanding the date of submission, and giving enough motivation to enhance their diligence. It is hereby recommended that parents should ensure a conducive environment at home. Parents and teachers should ensure that students are not exposed to stressful situations. Teachers should follow-up on students' conditions. The activities in the modules are in the right amount and the schedule of submission is set in a reasonable time.

08:50-09:15

69392 | *Why It is Important to Have a Global Perspective on Water Demand: Application to the Colorado River*

Cristina Vilaplana-Prieto, University of Murcia, Spain

Why is a price system the best way to allocate natural resources? The lesson sets the stage by describing the competing demands for Colorado River water. The Colorado River provides water for one out of every eight Americans for residential, industrial, mining, agricultural, and recreational needs. The river serves seven western U.S. states and Mexico, and water appropriation was established by an agreement forged in 1922. Senior water rights were given to the earliest (white) settlers and tended to be in the agriculture, ranching, and mining interests. Senior rights were also awarded to California after a series of Supreme Court cases throughout the twentieth century. Having senior water rights mandates that the same amount of water be allotted each year regardless of river totals. All others have junior rights and have to share the remainder. Ultimately, the federal government controls the water and has the final say in appropriation. The challenge is to align the individual needs of consumers with the health of the river while an ever-changing set of conditions influences both supply and demand. We have developed a teaching project for students of Political Science Degree (1st year). Each student must decide how much water to take and calculate the water usage's total value to society. They are given a number of scenarios that change their incentives to take water from the river. The students discover that when something is appropriately priced, its total value is maximized under a price system.

09:15-09:40

68537 | *From Multimodal Literacies to Environmental Literacy: Material Development for Eco-documentary Mediated Climate Change Education*

Tingjia Wang, Hiroshima University, Japan

Despite the increasing interest in climate change topics, educators are reported facing significant challenges in the design and implementation of climate change education due to the lack of a comprehensive, widely-applicable educational approach. Teachers tend to rely on public resources such as NGO websites, activist videos and eco-documentaries to design teaching and learning activities to engage students in climate change education. Since climate change topics are commonly discussed and debated in media discourses, scholarly attention has been paid to the necessity of media literacy in the development of climate literacy – "in order to be climate change literate, the public must first be media literate" (Cooper, 2011, p. 235). In this direction, drawing on social semiotics (Kress & van Leeuwen, 2006), the current study suggests that in order to be mediate literate, a reader/viewer must be multimodal literate, because a media text is typically a configuration of a number of semiosis (e.g., language, image, music, shot editing, camera angle). This presentation aims to introduce a metalanguage toolkit for teachers to select, implement and evaluate eco-documentaries for educational purposes. The toolkit will provide both educators and students multimodal lenses to understand how a wide range of semiotic modalities are carefully selected and configured into a cohesive filmic text, and how the filmic text effectively serves the climate change activist purpose. This toolkit will be illustrated by two documentary examples: one is the representation of scientific certainty in climate change theory; the other is the representation of collectivity in social change.

09:55-11:35 | Room C

Monday Online Presentation Session 2

Interdisciplinary Education

Session Chair: Webster Joseph

09:55-10:20

69877 | *Participatory Allyship: Creating and Sustaining University-Community Partnerships to Benefit Highly Stressed Communities and Accomplish Social Justice Goals*

Katherine Tyson McCrea, Loyola University Chicago, United States

Amzie Moore, Chicago State University, United States

Kevin Miller, Dominican University School of Social Work, United States

Heather Watson, Loyola University Chicago, United States

Racialized educational and economic inequalities have been insufficiently mitigated in the U.S. and there is increasing concern about inadequacies of evidence-based research findings to scale to effective community implementation. For universities to be on the front lines contributing remedies for educational and economic inequalities, University-community partnerships need to be stable and grounded in reflexive praxis, which is challenging given inequalities in privilege. This workshop offers praxis insights from a productive 17 year University-community partnership, the Empowering Counseling Program Participatory Science Initiative (ECP) of Loyola University Chicago School of Social Work (<https://empowercounselprog.wixsite.com/ecp-luc>), which implements participatory methods to co-design and co-evaluate, with urban youth of color experiencing low-income, free after school, summer, and counseling services. The workshop will provide materials co-authored with youth that include curricula, published studies, multimedia products, and intervention models. Topics addressed are: • Responding to community members' concerns about harm from universities whose research did not benefit communities, • Initiating a participatory partnership through a strengths-based needs assessment process • Engaging youth as positive change agents and co-researchers to advocate for their communities, • Trouble-shooting problems that can fracture partnerships, especially implicit biases, • Implementing participatory research processes that are faithful to communities' cultures while satisfying scientific aims, • Educating undergraduate and graduate students to be intellectual activists who can carry out participatory, human rights-based community partnerships, services, and research, including allyship, ensuring safety, preventing vicarious trauma, and developing cultural humility.

10:20-10:45

69985 | *Supporting Equity in Education for Underrepresented Learners*

Imani Akin, American College of Education, United States

Gail Claybrooks, American College of Education, United States

Educational institutions lead in the construction and dissemination of knowledge (Altback, 2003). The responsibility of supporting underrepresented learners in their pursuit of knowledge includes proactive and collaborative action. Higher education was once considered a tool for social mobility but now reinforces the social and economic divide (Miller (2019). Earning an education was a promise to level the playing field and help learners realize their potential and increase their opportunities for success. For some gaining an education is their measure of success in social advancement. For underrepresented learners, access to higher education is a challenge (NCES, 2019). For those who gain acceptance to educational institutions, there are challenges to navigating the environment to access resources and maximize their academic achievement. Cultural competence is a necessary skill for enhancing the educational experience of the underrepresented learner (Whitman & Jayakumar, 2023). Cultural competence as a requirement for higher education faculty and staff can reduce the effects of marginalizing learners. Marginality occurs as populations are pushed outside of the margins of support structures (Akin, 2013). Marginalized and underrepresented populations need support in learning to navigate through some educational systems. Collaborative strategies are needed to reimagine educational success for underrepresented learners striving for success in higher education. Greenberg (2022) recommends actions for educational institutions to support underrepresented learners that include incorporating equity priorities in the institutional culture. This paper will explore the barriers and challenges underrepresented learners may experience in higher learning. Strategies for overcoming the barriers and challenges include cultural competence for faculty and staff.

10:45-11:10

69942 | *Home Electrical Problems Among Women in Iligan City: Basis for Training Program on Electrical Energy and Technology*

Victor S. Rosales, Mindanao State University – Iligan Institute of Technology, Philippines

Adefa Silor, Mindanao State University – Iligan Institute of Technology, Philippines

Antonio Merca, Mindanao State University - Iligan Institute of Technology, Philippines

Electricity affected everyday life by providing essential resources and enhancing women's opportunities to perform their expected role as care workers more efficiently and in a qualitatively better way. This study used quantitative research to determine the home electrical problems encountered and experienced by the women of Iligan City and their skill level or lack thereof in dealing with the situation. Two hundred thirty (230) women from ten (10) barangays in Iligan City participated in this study and answered the survey. The findings revealed that most respondents are twenty-nine years old and above, married, and have a monthly income of 5000 pesos and below. It implies that most respondents fall into the poor income cluster or less than the official poverty threshold for a family size of five members. In addition, the women experienced and encountered various home electrical problems. Some of these home electrical problems are the cause and effect of another problem. A few of these problems technically violate the electrical code, which can compromise electrical safety at home. The findings further reveal that they consciously know they are unskilled in dealing with electrical home problems they encountered. Women are mindful that they cannot cope with problems with the essential electrical system in their homes. This does not, however, imply that women are less valuable than men. On the contrary, skills training is highly recommended to counter such problems and help women deal with home electrical problems.

11:10-11:35

68925 | *The Effect of Explicit Comprehension Strategy Instruction on Reading Comprehension of Male Readers at the Primary School Level in Trinidad*

Webster Joseph, Claxton Bay Senior Anglican Primary School, Trinidad and Tobago

Literacy research suggests that boys generally underperform academically when compared to their female counterparts (NAEP, 2010). Empirical data link the struggles boys encounter in literacy to disruptive classroom behaviour (Alloway et al., 2002). This sometimes contributes to school violence as boys become disengaged from learning activities that depend on reading proficiency. Explicit comprehension strategy instruction (ECSI) has shown to be effective in improving reading comprehension of students in other educational jurisdictions (Tiruneh, 2014). This presentation shares quantitative findings from a larger mixed-method study I conducted that sought to determine the effect of ECSI on reading comprehension of readers in the Trinidad context. One hundred and sixty-eight students from two schools in one Education District participated. Four classes were randomly assigned to experimental and controlled groups. Experimental groups were taught using ECSI while controlled groups were taught using Traditional Comprehension Instruction (TCI). An oral reading fluency (ORF) assessment was used to determine the reading proficiency of students. A pre-test and post-test design was used over six weeks. Repeated-measure ANOVA was used to determine significant factor interactions. Descriptive statistics were used to compare groups. Three significant factor interactions were observed. ECSI improved comprehension score means of developing readers ($M=+0.32$) while those with TCI ($M= - 0.25$) fell. More specifically, male developing readers were found to respond more favourably ($M= +0.85$) to ECSI than their female counterparts ($M= -0.07$). The implications of this study can inform classroom instructional practices to engage males in literacy learning and may reduce their disruptive behaviours in classrooms.



Virtual Presentations

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ERI2023 Virtual Poster Presentations

Assessment and Learning Analytics

67641 | *The Correlation between Academia and Parents of English Language Learner(s)*
Sharmeen Akter, St. John's University, United States

Existing research claims that it takes approximately seven years for English language learners to attain proficiency levels. While many studies exist on the different types of support English language learners need, not many identify if they receive any support at home. This ethnographic pilot study aims to determine how knowledgeable the parents of English language learners are about the New York State English as Second Language Achievement Test (NYSESLAT). English language learners take this test yearly until they score a proficiency level. Educators expect parents to be aware of and support the students for the test as it is tied to their child's academic success. The study specifically examines the parents' awareness of the skills being measured by the NYSESLAT and the ways they support their children. Data for this research will be gathered through parent interviews, students' NYSESLAT growth from first grade to second grade, reflective memos written after each interview, and collecting documents sent home from the school regarding the NYSESLAT test. The results will inform educators on how to prepare parents in their efforts to help their child progress toward the next level of English language proficiency.

Emerging Philosophical Perspectives on Learning & Education

67169 | *Influence of Strength Training on the Self-efficacy of Sports Performance: National Collegiate Athletic Association Student-athletes Experience of a Strength Training*
Alfred Caronia, St. John's University, United States

The aim of this pilot study was to explore an NCAA Division 1 female volleyball players' experience of a strength and conditioning program and the result this has on self-efficacy of sport skill performance. This phenomenological study comprised of 10 college aged participants that have strength training program experience. Data was collected using semi-structured interviews and a reflective journal he transcribed interviews were analyzed using qualitative content analysis. From the analysis, four themes emerged: performance enhancement, injury prevention, motivational experience, and a learning experience. From the players' perspective care needs to be taken to explain the purpose of an exercise and the benefit it will have for play performance. Other factors that play an important role in a strength training program is team motivation, individual goal setting, bonding, and communication with the strength coach, as all these items appear to be fundamentals of coaching.

69642 | *The University and Postmodern Times*
Alyson da Silva Leal, Unifenas, Brazil
Virgínio Cândido Tosta de Souza, Universidade Vale do Sapucaí, Brazil
Kátia Rejane Rodrigues Leal, Unifenas, Brazil
Carolina Rodrigues Leal, Unifenas, Brazil

Around the 1950s, in the so-called "post-industrial era", science and the University, given the technological impact of knowledge, underwent substantial changes in their statutes, by marginalizing the theoretical framework provided by the philosopher, relegating ontological issues to the sidelines and prioritizing gnosiological issues. From the moment that the metaphysical framework of modern science was invalidated, concepts dear to modern thought such as "truth", "subject", "totality", "reason", "progress" give way due to disbelief in the face of philosophical-metaphysical metadiscourse, with timeless and universalizing pretensions. (LYOTARD, 1998) The pursuit of university efficiency and excellence can no longer be based on the traditional alchemy of cost-benefit calculation with increased productivity (manpower production that meets market needs). Success evaluation criteria begin to incorporate dimensions that go beyond the economic organization that sees the University as a company that must be guided by managers, but that concern social, cultural life and environmental preservation. It can be said that efficiency is not just "doing things well", according to market rules, but "doing good things" according to ethical principles. It is the duty of the Academy to bring to those who enjoy it directly or indirectly the eudaimonia that is not based on riches, nor pleasures, nor on honors but on a virtuous life, raising the thought for the common good, in which one stops seeking one's own pleasure and elevates the thought of the common good, bringing enthusiasm in living.

Engaging At-Risk Youth

68937 | *I Did Not Sign Up for This: Effectively Teaching Students with Emotional Behavior Disorders*
Salena Fenceroy-Smith, St. Thomas University, United States

The movement towards the least restrictive environment for students with disabilities presents the increasing need for general education teachers to be efficient in providing quality instruction. However, are the givers of knowledge, motivators of success, encouragers of critical thinking that are put in front of students equipped to support students who present with emotional and behavioral disabilities? The problem arises in that educators are not fully equipped to address these behaviors in a general education classroom. Therefore, the topic studied was the lack of adequate preparation of educators in classrooms with high numbers of students with Emotional Behavior Disorders. The expected level of readiness is not properly set by teacher preparation programs before sending them into the field of public education affecting student outcomes. Qualitative research methods were used to conduct semi-structured interviews with individuals who participated in pre-service and professional coursework training programs and serve in the education field. Their greatest challenges and calls to action for educational leaders were revealed through the dialogue of the interviews. The purposeful and convenient method of sampling of 10 Title I teachers, at various elementary schools, with a high number of trauma exposure or a diagnosis of Emotional Behavior Disorders, gave insight on their perceived level of training. The research found that educators whose pre-service professional coursework was obtained either via a university or an alternative certification program perceived that they had insufficient training to prepare them for their career.

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ERI2023 Virtual Poster Presentations

Inclusive Pedagogy

69714 | *Dual-function Teaching Kits for Visually Impaired Inclusive Education*
Chu Yu Cheng, Southern Taiwan University of Science and Technology, Taiwan

Education right is a fundamental right of humans. The Taiwanese government also clearly defines policies related to visually impaired children's primary education and essential obligations. It followed the global trend of inclusive education strategies, which adopted a hybrid placement education system with a supplementary system so that students with disabilities can study in elementary schools near the living hood and receive the same education as health students. On the other hand, for health students, it is also a more significant opportunity to learn from peer acceptance, cultivate empathy, and have human rights education with their classmates in this arrangement. However, there are no inclusive learning kits in the market currently. This paper presents a dual-purpose educational kit in an inclusive learning place. The implemented prototype uses the theory of VAKT (Visual-Auditory-Kinesthetic-Tactile) teaching method proposed by Fernald as the leading core theory. The whole teaching strategy of this new kit will combine physical exercises, reading guidance, an audio guide, and multiple interactive media together by senses of "touch", "hearing", "visual", and "kinetic" to complete the cognitive relationship between appearance and positioning direction for all students. A visually impaired case on urban insect learning, using our prototype, has been illustrated to show how the implemented works.

International Education

67977 | *Picture Book Categorization Charts: Introducing Three North American Authors to Young Learners' EFL Classrooms*
Miori Shimada, Anaheim University, United States
Sarah Mason, Macquarie University, Australia

Picture books are an important part of early language education. In addition, storytelling activities encourage students to communicate in authentic ways and to think critically. This presentation focuses on picture books by Eric Carle, Leo Lionni, and Arnold Lobel, who are well-known writers and illustrators of beloved picture books such as *The Very Hungry Caterpillar*, *Swimmy*, and the *Frog and Toad* series. These titles are already popular among Japanese children because they have been selected, along with many Japanese authors and foreign authors, for use as Japanese language textbooks. These stories also include universal themes such as friendship, love, and self-awareness. Additionally, when used in English language classrooms, they help young readers further expand their English vocabulary. This presentation aims to discuss and explore the following areas by introducing picture book categorization charts developed by the lead presenter:

1. How picture books useful for teachers in early learners' English language classrooms
2. The kinds of words, phrases, and activities that can be introduced to young learners of English using picture books
3. How teachers can effectively use picture books based on the categorization charts the author developed
4. How teachers can effectively arrange their lessons based on the categorization charts

The results of the mini-survey about the charts will also be shared.

Audience members will benefit from further discussions of ideas to adapt picture books in other innovative ways.

Virtual, Augmented and Mixed Realities

68429 | *Virtual Reality (VR) Simulation of Chemistry Lab Using Blender and Unity*
Belinda Mutunhu Ndlovu, UNISA, South Africa
Ngonidzashe Maphosa, National University of Science and Technology, Zimbabwe
Sibusisiwe Dube, National University of Science and Technology, Zimbabwe

The new age of coping with change has driven us to employ all the technology to make everything in our day-to-day work and study life available remotely. In the time of virtual education and virtual meetings, this project intends to add to virtual education. Modern times have made us realize that lessons may be held online and do not require a physical presence in the institution of education, but the same cannot be said for laboratory-integrated disciplines. Our answer to having access to laboratories that would necessitate physical participation is to recreate the laboratory and its exercises to deliver an analogous interactive experience through a VR-rendered 3D simulation. In this project, we are replicating a chemical laboratory with 3D animation. This allows the user to do experiments in the same manner as they would in a chemistry laboratory. The simulation is rendered in VR so that the user can interact with the objects in the 3D world. The elements are generated with Blender and the interactions are managed with Unity. Thus universities and institutions that have chemistry laboratory integration into their curricula can benefit tremendously from this project.

Workplace Learning

68107 | *The Teaching Experiences and Perspectives of Novice Educators During the COVID-19 Pandemic, the 2020–2022 School Years*
Erika Prevost, St. John's University, United States
Elena Jurasaitė-O'Keefe, St. John's University, United States

The Covid-19 pandemic was a time of hardship for communities all over the world. As governments raced to ensure the health and safety of their communities, school districts did the same for their students, families, teachers, and staff. The switch to remote instruction brought many challenges to students and their teachers, and as schools have made the shift back to the classroom, new challenges and obstacles have arisen for students, their families, and their teachers. This qualitative pilot case study aims to address the challenges, accomplishments, and supports that novice educators have experienced during the Covid-19 pandemic, as well as insights into the ways that novice educators have navigated these trying times at the start of their careers in education. The findings of the study show that many novice educators were resourceful during the pandemic, such as utilizing online and educational technology with ease, yet struggled to make interpersonal connections with their students and their colleagues. Participants also felt that much of what was learned in education classes at the university level was not utilized due to the pandemic and classroom regulations. Those who felt that they were able to foster relationships with their colleagues and students and were able to transfer their own learning to their classrooms, described explicit support from their administration and grade teams. The findings from this pilot study will inform further research on the topics of novice and pre-teacher support and mentorship.

ERI2023 Pre-Recorded Virtual Presentations

Artificial Intelligence and Adaptive Learning

70013 | *Use of Artificial Intelligence in Career Guidance: Perspectives of Secondary Guidance Counselor*
Jocelle Monreal, University of the Cordilleras, Philippines
Thelma Palaoag, University of the Cordilleras, Philippines

Choosing the correct academic track and strand is one of the major decisions that a junior high student must make, which can be difficult due to the numerous influences in their environment. It is important to assist these students by using an effective tool to provide them with choices of suitable tracks or strands, as this plays a critical role in the student's future career success. This study aims to discover the use of Artificial Intelligence and its benefits or impact on career guidance for every public secondary school in Legazpi City, Philippines. The researcher used the mixed method to support and achieve the research objective. The systematic review was used to gather and analyze related literature and data. Interviews are conducted with all guidance counselors. Sentiment analysis was also done in order to present the respondent's insights and opinions. Surprisingly the respondents gave positive feedback about the future of career guidance with the use of Artificial Intelligence. Overall, the results on the topics show that Artificial Intelligence has great potential in assisting career guidance for both the guidance counselor and grade 10 students. The respondents gave the following impact that AI can bring for them: (a) work less and faster, (b) easily guide each student at one glance, (c) will open for more research, and (d) students can decide what path to take. Given the lack of intelligent tools or software aid systems to support career guidance, it would be beneficial for the field of continuous research and development.

Assessment and Learning Analytics

67535 | *Socioeconomic Status Impact on Asian Americans and the Model Minority Myth*
Erika Yang, University of Southern California (USC), United States

This research aimed to explore the implications of the effects of the model minority myth on Asian American students and how an Asian American student's socioeconomic background can influence their response to the myth, predominantly in seeking higher education. Socioeconomic background can affect a student's financial ability to attain outside resources and support. While Asian American students who come from various socioeconomic backgrounds tend to internalize the harmful model minority myth, each student's socioeconomic background plays a strong influence in their perspective on the myth. This study provides an in-depth exploration for the following research questions by experimental examining an East Bay Area high school located in North California and analyzing a survey from 120 students about how an Asian American student's socioeconomic background influences their perception of the "model minority" myth in seeking higher education. The key finding is that Asian American students with a higher socioeconomic background tend to unknowingly respond more favorably towards the model minority myth in comparison to those with lower socioeconomic backgrounds. There can be a conformist mindset, where there is no need to change a system that works for them - those who have achieved their desired socioeconomic status through model minority ideals see no issue with the system and are persuaded to pass on their values to future generations. Asians with a higher socioeconomic background can perpetuate the model minority myth. This myth can continue to unrealistically push Asian American students to newer and higher standards.

67664 | *Analysis of Time Management, Problem Solving Ability, and Automotive Electrical Competence*
Heru Arizal, Universitas Negeri Surabaya, Indonesia
Suparji Suparji, Universitas Negeri Surabaya, Indonesia
Marniati, Universitas Negeri Surabaya, Indonesia
Bambang Suprianto, Universitas Negeri Surabaya, Indonesia
I Gusti Putu Asto Buditjahjanto, Universitas Negeri Surabaya, Indonesia
Ali Hasbi Ramadani, Universitas Negeri Surabaya, Indonesia

In the 21st century, the industrial revolution 4.0 and regulations restricting the use of fossil fuels have caused the automotive industry to compete to create environmentally friendly vehicles. Electric-based vehicles are the right solution for the vehicles of the future. Therefore, the ability of workers in the electrical sector is needed. Seeing this need, it is necessary to improve the quality of human resources, especially in the field of automotive electricity. The quality of human resources can be seen from their competence in working. Researchers want to identify internal factors that affect competence, especially in the field of automotive electricity. Internal factors observed in this study are problem-solving ability and time management ability. The research sample is mechanical engineering students who have taken automotive electrical practice courses. Data analysis of this study used simple linear regression analysis. The results showed that problem-solving ability has a significant effect on competence, while time management does not affect competence. Therefore, to improve student competence in the field of automotive electricity, it is necessary to enhance problem-solving skills.

69984 | *Summative Assessment Development for Classroom Use: Insights from Classical Test Theory and Item Response Theory*
Mark Lester Garcia, Ateneo de Manila University, Philippines
Kevin Carl Santos, University of the Philippines, Philippines
Catherine Vistro-Yu, Ateneo de Manila University, Philippines

This presentation reports an ongoing empirical study where a summative test for classroom use is analyzed for further improvement using psychometric techniques from Classical Test Theory and Item Response Theory (e.g. Rasch analysis and 2PL or 2-parameter logistic model). The research aims to show a comparison of these techniques by applying them on the same set of item responses to a test on polynomial functions which was devised as a summative assessment. The said test consists of fifteen (15) multiple-choice items that were scored dichotomously, and five (5) constructed-response items which were polytomous items. The analyses were conducted using R, which is an open-source statistical software with packages that are widely used in the field of psychometric assessment. Insights that are drawn from the results can be very useful in understanding the process of test development especially that less attention is provided to analysis of test items after summative assessment in the classroom. Given that Philippine teachers are burdened with heavy workload and other administrative tasks, it is understandable that classroom teachers tend to devote more time to scoring and grading tests and may have no time to analyze and improve the test. Additionally, results from this study can help inform the existing body of literature in test development regarding effective psychometric techniques that help improve the individual quality and functioning of test items.

ERI2023 Pre-Recorded Virtual Presentations

Coding and Robotics

67999 | *Investigating the Impact of Educational Robotics on Underserved Students' Career Interests*

Rachel Van Campenhout, VEX Robotics, United States

Jessica Debruy, Sister Thea Bowman Catholic Academy, United States

Lauren Harter, VEX Robotics, United States

Among its many benefits, educational robotics has been found to increase in student completion of STEM degrees and interest in science, technology, engineering, and math (STEM) careers. Given the national and international demand for a workforce trained in STEM areas, increasing student attitudes toward STEM and interest in careers in STEM areas is critical. Educational robotics provides students with an authentic, hands-on way to experience interdisciplinary STEM learning, which increases positive perceptions of these disciplines as well as interest in related careers. Yet the benefits of educational robotics are not always equally distributed for students, and therefore the impact of this curriculum is not well understood for underserved communities. In this study, an educational robotics curriculum was implemented in an urban private school that serves primarily minority students. The students at this school—ranging from third to eighth grade—had no prior experience with robotics, and little to no experience with construction-type toys or programming applications. A pre-survey was administered prior to a 12 week robotics curriculum (differentiated by age group), followed by a post-survey. The survey results on how student interest in STEM careers changed will be discussed. This research project aims to create a small window into the impact a robotics program could have on underserved students in particular to engage and prepare them for a future in STEM.

Community-based Education

70489 | *The Survey on Online Learning for Secondary School Students During the COVID-19 Pandemic*

Qi Zhu, University of Houston - Victoria, United States

Joyce Zhu, Awty International School, United States

COVID-19 has forced nearly all students including K-12 into online education during pandemic time. This study explores how students at the secondary school reacted to the full-time online learning during the COVID-19 pandemic. A survey has been carried out in Fort Bend and nearby counties, Texas to compare students' online learning conditions, experiences, and expectations. Some implications were made to advise the related policy makers and schools on improving for the future online learning into the secondary school students.

The survey and this study aimed to examine the online learning for the feedbacks from the secondary school students and could provide some potential actions to improve the future online education. Formally, there are three research questions for students during online learning compared to face-to-face education:

- What learning conditions were experienced by students? - What benefits and obstacles were received by the students? - What expectations do students have for future online learning education?

The survey was conducted from September 2022 to December 2022, targeting secondary school students, from grade 9 to grade 12. A total of 180 students completed the survey. For question 1, we surveyed the teaching platform, delivery methodology, learning tools, and what factors interrupt the classes. For question 2, we asked the students to compare online learning with face-to-face learning in accessing materials, spending time, teaching materials, communication with teacher, participation, teacher response, online support, workload, bonding with peers, and grade. Finally, we have a few open questions for research topic 3.

Emerging Philosophical Perspectives on Learning & Education

67752 | *Remembering the Future: Making Art & Design Education Relevant in a Decolonizing, Globalizing Pakistan*

Sadia Kamran, Ruman Art Initiative, Pakistan

At the dawn of 21st century the idea of decolonization was getting stronghold in every field of life. The concept was considered to be an essential integer for global harmony. In Pakistan, it took around two more decades to create awareness and to popularize the notion in a way that engaged the thinkers, academics, policy makers and other stakeholders in making conscious efforts to decolonize the society. The need to reevaluate the strategies for a more comprehensive and result oriented approach in art and design education is realized today. This study while looking at the conceptual challenges relocates the compass on imminent socio-political, economic and environmental issues of global nature then merely reiterating the cause and effect of being a former colony. It proposes contextually-engaged learning and systems of knowledge production as a promising approach towards a more stabilized society that is eager to create an impact on the global horizon. A recent group show (Sep, 22) at Pakistan National Council of Arts (PNCA) Islamabad titled Remembering the Future-Decolonizing Creative Spaces is taken up as a case study that exemplify the creative responses of such a mindset. The background of three participating artists, alumnae of the National College of Arts, Lahore (the only British established art school in the region that came to be Pakistan after independence) with their local and diasporic experiences make the show most relevant in physically, intellectually and conceptually processing the present frameworks and envisioning the future for art and design education in the Global South.

ERI2023 Pre-Recorded Virtual Presentations

Enhancing Access for Underrepresented Learners

66781 | *Supporting English Language Learners in Our Classrooms*

Jill Tussey, Buena Vista University, United States

Jessy Bibler, Buena Vista University, United States

Michelle Metzger, Buena Vista University, United States

Leslie Haas, Xavier University of Louisiana, United States

The United States has an increasing number of students with a native language other than English. Educators today must be prepared to teach and support these students academically and socially-emotionally. As we know, it is important to ensure learners have natural opportunities to speak in their native language but not all educators have a clear understanding over how to embed these opportunities in the classroom setting. The population for this oral presentation will focus on elementary students ranging from ages of 5 to 12. Participants will learn about the needs of English as a Second Language (ESL) students in classrooms today. Activities and games in the areas of literacy, math, and physical education to support the ESL students in the elementary classroom will be shared during the presentation. Additional activities and games will be shared to support the social-emotional needs of ESL students in the elementary classroom setting. The final focus of the presentation will be methods to increase family engagement between educators and parents of ESL students, specifically in the areas of literacy, math, and physical education. During the presentation, information will be shared as to how these three areas benefit the ESL students academically and socially-emotionally. The elements of the presentations can be taken and instantly embedded into practice in the classroom setting to support the ESL students. Presenters have many years of experience in the K-12 setting as well as in the higher education setting that provides them with a wealth of knowledge to share with attendees.

Enhancing Access for Underrepresented Learners

69666 | *Bridging Distance for Young Students with Disabilities in Online Learning*

Kijung Ryu, Fordham University, United States

This virtual video presentation reviews literature on how to engage young students with disabilities in effective learning and discusses how this research can be applied to developing lessons for online teaching. Many teachers have reported their struggle to engage young children, especially children with disabilities in synchronous online learning activities. When teachers needed to take on the responsibility of online teaching, they felt unprepared for the challenge (Marra, 2004; McAllister & Graham, 2016). According to Appel (2006), teaching online classes is fundamentally different from teaching traditional face-to-face classes in several aspects such as instruction, communication, and behavior management. In other words, teachers are required to use different skill sets for teaching online classes (Barbour, 2012a; Barbour et al., 2013). Therefore, teachers should be given clear, specific guidance for online instruction with explicit examples. Through this video presentation, participants will gain tools, activities, and tips for assessing the needs of and developing engaging lessons for young learners with disabilities for teaching online.

Experiential Learning

68488 | *An Adventure-Based Program in Promoting Interpersonal Qualities and Well-being of Students in Higher Education*

Hoi Nga Ng, Caritas Institute of Higher Education, Hong Kong

Kam Weng Boey, The University of Hong Kong, Hong Kong

Background: Late adolescents in higher education are going through a shifting from being dependent as recipient of parental guidance to becoming independent individuals in a larger social context. They need to develop interpersonal qualities to establish satisfying relationships. Besides, they also experience stress and anxiety which may result in mental health problems. Objectives: This study aimed to foster positive interpersonal qualities and to promote psychological well-being among students in higher education. Methods: Six groups of 1-day workshops based on "adventurous activities" were organized. The group activities (each with 15 to 20 participants) were designed to help establish team spirit, trustful relationship, and mutual supports through which positive interpersonal qualities and psychological well-being would be promoted. The activities were run by social workers of a social service agency, officers of student affairs, and academic staff. A total of 475 first and second students (men age = 19.3, SD = 2.8; 67.9% females) participated in the workshops. Results: Results indicated that the interpersonal qualities of caring, integrity, social responsibility, and perseverance were significantly promoted [$F(1, 455) = 5.653$ to 42.13 , $p < .05$ or less; Cohen's $d = 0.10$ to 0.29]. Global self-esteem was promoted [$F(1, 455) = 64.07$, $p < .001$; Cohen's $d = 0.29$]. Depression, anxiety, and stress as measured by DASS-21 were significantly decreased [$F(1, 455) = 4.32$ to 35.50 , $p < .05$ or less; Cohen's $d = 0.08$ to 0.24]. Conclusions: Efficacy of the intervention in promoting interpersonal qualities and mental health status was empirically demonstrated. With the promotion of interpersonal qualities and psychological well-being, students in higher education should be able to cope with their stress with greater resilience.

68721 | *Qualitative Analyses of Hybrid Learning Experiences of College Students With Special Education Needs*

Jennifer Fabula, De La Salle-College of Saint Benilde Manila, Philippines

Hybrid learning has become increasingly popular in higher education institutions. It started after the relaxation of COVID-19 restrictions, where students could now simultaneously participate in face-to-face and online learning. Hybrid learning slowly brings students back to school who have been in remote learning for almost three years. Although there are several studies on hybrid learning among regular college students, little is known about how students with special education needs experience this learning approach. This descriptive qualitative study aimed to fill this gap by analyzing their perspectives and experiences in hybrid learning environments. It utilized semi-structured interviews and a thematic-content analysis method. Participants of this study include college students diagnosed with social, emotional, and behavioral problems, sensory impairments, learning disabilities, and physical impairments. This study revealed that students' experiences in hybrid learning were characterized by efficient learning, safe feeling, a sense of belonging, and expectation setting. Hybrid learning provides college students with special education needs the benefits of efficient learning and a safe feeling. However, it posed challenges in fostering a sense of belonging and defined expectation setting, underscoring the need for tailored approaches to meet their diverse needs.

ERI2023 Pre-Recorded Virtual Presentations

Indigenous Ways of Knowing

68080 | *Ethno-Science, Technology, Engineering, and Mathematics (EthnoSTEM) in Sama Mat-Weaving: Implications for Classroom Teaching*

Aljemedin Jaudinez, Mindanao State University Tawi-Tawi College of Technology and Oceanography, Philippines
Ma. Nympha Joaquin, University of the Philippines Diliman, Philippines

Mat weaving is culturally and economically significant among the Sama people of the province of Tawi-Tawi since time immemorial. This study sought to find concepts and processes of ethnoscience, ethnotechnology, ethnoengineering, and ethnomathematics (ethnoSTEM) present in weaving tepo, a hand-woven mat of the Sama, made from indigenously processed leaves of pandan or screw pine (*pandanus tectorius*). To determine ethnoSTEM ideas, concepts and processes in tepo weaving, an ethnography was conducted involving five female mat weavers in a coastal village in Tawi-Tawi's major producer of tepo, the Municipality of Tandubas. Data were gathered primarily through observations and interviews during a monthlong community immersion. The data collected were coded and analyzed thematically and triangulated through various techniques. Results revealed that ethnoscience was observed in the processes determining the dyeability of pandan strips, as well as in the procedures employed in its softening and bleaching. Ethnotechnology tools are in the form of bolo, pandan presser, pandan slitter, traditional stove, bamboo scalp scratcher, and other local cooking tools, with each tool exhibiting unique characteristics and functions needed for weaving. Ethnoengineering was evident in the preparation and boiling of pandan strips to create, bleach, and dye pandan strips for weaving and fastening the tepo. Ethnomathematics comprised primitive length measurement, arithmetic calculations, ratio and proportion, linear and quadratic equations, sinusoidal functions, basic geometric concepts, circles, symmetries, and isometries. It is concluded that the concepts and ideas of ethnoSTEM found in Sama weaving of tepo are loaded with scientific affluence that should be preserved to preclude it from fading to oblivion. Implications to classroom teaching are likewise put forward.

Informal Education

68489 | *Secondary School Students' Sexual Attitude and Their Views on School-based Sexuality Education: A Population-based Study*

Hoi Nga Ng, Caritas Institute of Higher Education, Hong Kong
Kam Weng Boey, The University of Hong Kong, Hong Kong
Chi Wai Kwan, The University of Hong Kong, Hong Kong

Background: Students' attitudes play an important role in the efficacy of school-based sexuality education (SBSE). A pilot study in Hong Kong suggested that demographic characteristics, religiosity, and spirituality were associated with students' sexual attitudes and their views on SBSE. Objectives: This study recruited a population-based sample of secondary school students to validate findings reported in the pilot study.

Method: A questionnaire was designed to collect data from a web-based survey. A total of 2240 secondary school students (mean age = 14.6, SD = 1.9; 63.2% were females) responded.

Results: Students were slightly liberal in sexual attitude. They were low in religiosity but high in spirituality. Consistent with findings reported in the West, a great majority (95%) of the students were supportive of SBSE. Male gender, older age, higher education, no religion affiliation were significantly associated with liberal sexual attitudes [$F(1, 2238) = 9.13$ to 144.93 , $p < .01$ or less]. The relationships of demographic characteristics with attitude towards SBSE were negligible. Similar to Western findings, religiosity and spirituality were negatively associated with liberal sexual attitudes ($r = -.35$ and $-.27$ respectively, $p < .01$) but their positive relationships with attitude towards SBSE ($r = .07$ and $.24$ respectively $p < .01$) were different from the negative relationship reported in the West. The negative relationship between liberal sexual attitudes and attitude towards SBSE ($r = -.19$, $p < .01$) was another incongruent finding.

Conclusions: This study revealed similar findings reported in the West. Nonetheless, findings specific to the local setting were observed. Though the effect size of the incongruent findings was small, they were specific to the local sociocultural setting and need to be considered in the promotion of SBSE.

Instructional Design and Learning Sciences

67822 | *Transformational Business Education for Resilience and Economic Sustainability*

Maia Chiabrishvili, American University of the Middle East, Kuwait
Ketevan Chiabrishvili, National Defense Academy, Georgia
Ana Tvaliashvili, Georgian Technical University, Georgia

The paper suggests a perspective on improvements in business education which will be reflected in the firms' improved resilience and economic sustainability. The research aims to test the hypothesis that "pre-determined contents of the business courses become insufficient for the development of students' improvisation to find solutions to challenges occurring in an uncertain environment." This subject has received insufficient attention, leaving a significant gap. Moving in this direction of transformative learning will ensure students' ability to apply critical thinking and widen their frames of understanding. Graduates will acquire skills and the ability to quickly adapt their knowledge to recover business operations from crises of different scales. The output of higher business educational institutions will become more quality-oriented.

The method of content analysis of existing lifelong learning models in adult education allowed authors to incorporate additional teaching modalities and introduce a new model for the current uncertain expectations of businesses.

The paper concludes with the reasons why current business-related programs require updates. The changes mentioned above will equip graduates with practical knowledge of different aspects of social responsibility and a conscious desire to contribute to a more sustainable future.

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ERI2023 Pre-Recorded Virtual Presentations

Intercultural Learning

66810 | *The Development of Students' Intercultural Awareness and Understanding Through Adopting an Intercultural Pedagogy in Foreign Language Teaching*

Amina Guerriche, University of Constantine, Algeria

The recent trends in foreign language teaching -influenced widely by the process of globalization, interculturalism, global flows, and migration- are leaning toward adopting an intercultural perspective in foreign language teaching aiming at developing students who are global citizens able to effectively function across diverse boundaries (cultural, social, geographical). Researchers call for intercultural learning and teaching perspective that would foster and increase intercultural awareness and understanding (e.g., Guilherme, 2002; Byram et al., 2002). The presentation at this conference is based on research that aims at unfolding whether including the cultural dimension in foreign language instruction can help in developing students' intercultural understanding and awareness. In doing so, a cultural pedagogical experiment was designed and conducted for the period of one year at the level of the university. Data were collected qualitatively and analyzed thematically. Results help in drawing important implications for educational institutions, foreign language teachers, and syllabus designers about the importance and effectiveness of perceiving foreign language instruction as a social activity that can nurture interculturally competent individuals who adequately respond to the demands of today's intercultural and globalized societies. The research also contributes to suggesting new and innovative teaching techniques that can be used in intercultural language teaching accommodating both the physical and online environments.

International Education

68001 | *Culturally Responsive Approach in STEAM Secondary School: Teachers Perceptions*

Emmanuel Ekpu, St. John's University, United States

To effectively teach the increasingly diverse students in United States public schools, educators must be aware, acknowledge, and be sensitive to the skills, culture, interests, and experiences our varied learners bring to the classroom. Furthermore, educators must connect students' cultural knowledge to academic knowledge to relate the concept to students' lives in meeting students' academic expectations. This pilot study explores teachers' experiences engaging in culturally responsive teaching to bridge the gap between cultural and academic knowledge to increase students' conceptual understanding of science topics. This ethnographic case study research examines the issue of race using the lens of Critical Race Theory (Culturally Relevant Teaching) as the theoretical framework to make quality education accessible to all students, irrespective of students' cultural background. This study uses a purposive sampling technique to include two secondary school science teachers in a Northeastern United States of America public school with more than five years of teaching experience. Teachers' reflective journals and two rounds of semi-structured interviews would be analyzed thematically by categorizing data using similarities and relationships between data into themes. The examination of teachers' experiences incorporating students' diverse cultures into their curriculum will provide insight into strategies they have applied successfully. Also, it will serve as a rubric to inform professional development for pre-service teachers.

69952 | *Knowledge Management Enablers and Impacts on Institutional Accreditation Outcomes: An Empirical Study of BGA Accreditation in China*

Jing Wang, Japan Advanced Institute of Science and Technology, Japan

Kim Eunyong, Japan Advanced Institute of Science and Technology, Japan

In the increasingly competitive and internationalized higher education, institutional accreditation has become a supportive role in higher education institutions' (HEIs) ranking and development. Institutional accreditation is a form of knowledge sharing and transfer in organizational management, research, learning and teaching, and networking. But how can such knowledge sharing be enabled within different higher education organizations? The main objective of this research is to explore the relationship between knowledge sharing enablers and institutional accreditation outcomes. Derived from in knowledge sharing enablers (Hall et al., 2021), this research builds a model of knowledge management (KM) enabler composed of organizational culture, trust, information technology and employee motivation. A cross-sectional scale questionnaire will be developed to dig into the relationship between KM enablers with institutional accreditation. Together these KM enablers, including organizational culture, trust, information technology and employee motivation, were identified to be predictive factors for organizational KM and positively related to institutional accreditation outcomes. This research contributes to the future literature on dimensions of knowledge management and HEIs' organizational development, as well as KM enablers in higher education. It is also useful in practice to higher education administrators and stakeholders involving in supporting educational internalization and regional accreditation.

70009 | *Transformative Internationalization Processes in Ibero-American Higher Education Institutions*

Alba Lucy Guerrero Díaz, Pontificia Universidad Javeriana, Colombia

Alberto Flórez, Pontificia Universidad Javeriana, Colombia

Alejandra Bolivar, Pontificia Universidad Javeriana, Colombia

Since the beginning of the 21st century, the internationalization of higher education has become a central concern in institutional agendas, due to the geopolitical changes, dynamism and diversity of the global context, which has generated diverse ways of understanding and focusing internationalization processes and actions. In this context, the internationalization dynamics of nineteen Ibero-American higher education institutions (HEIs) are analyzed in terms of their understandings, trajectory, functioning, capacities-needs, interculturality and the impact of COVID-19. This collaborative qualitative research shows that internationalization from a transformative perspective is an emerging perspective implemented in HEIs that helps to consolidate policies and plans that mainstream internationalization. This approach allows to achieve a greater impact of actions at the institutional level and in the educational community in a diverse and asymmetric group of HEIs.

ERI2023 Pre-Recorded Virtual Presentations

Learner Experience Design

67170 | *The Impact of the Student Athlete Identity*
Maria Savva, St. John's University, United States

The concept of athletic identity has been defined as the degree to which an individual identifies with their own athlete role (Brewer et al., 1993). Based on this research, positive and negative connotations of athletes persisted throughout time. Studies portray the varying correlations between athletic identity, academia success and motivation in the identity of the athlete. With this, the goal of this study is to determine if the transcendence of academia and athletics in lives of former athletes continue beyond college into their current professional lives. This pilot case study examined 3 prior student-athletes that are currently in different professions and determinants of their adult life. Through my qualitative approach of interviews, self-reflecting journals, and questioning former male elite athletes, the question that arises is: How has former athletes' athletic identity and academic journey contributed, if at all, to their lives after college? Through coding and analysis, the correlation between one's athletic identity and academic journey transcended to their current lives in many ways despite the participants' previous sport, current workplace, or location of education. The goal of this research is for the development of a framework in academia to internationally integrate athletics within educational policy and curriculums in order to create more successful and motivated generations.

Rural Education

68454 | *Gender Differences in Primary School Achievement in Ghana: The Moderating Effects of School Types and Localities*
Maxwell Nyatsikor, University for Development Studies, Ghana

The study used national achievement data from Ghana to explore the extent pupils' gender accounted for achievement differences in mathematics and English Language and how these differences were moderated by the types and locations of the schools they attended. The sample size comprised 16,429 primary 3 pupils drawn from 448 schools. A multilevel modelling technique was used to analyse the data. The study found statistically insignificant gender-linked differences in English Language but significant differences in mathematics achievement. The types and locations of schools significantly impacted pupils' achievement but could not offset the statistically significant gender-related differences in mathematics. Girls in urban schools outperformed boys in English Language and mathematics, albeit insignificantly. Boys in rural, public and private schools did better than girls in English, although the differences were not statistically significant. However, there was a statistically significant difference in mathematics achievement by boys and girls in rural and public schools but not in urban and private schools. The study's outcome suggests potential differential learning opportunities for boys and girls in some schools and localities, predominantly in rural schools in Ghana. The results imply that Ghana is yet to fully achieve Sustainable Development Goal 4, which seeks to reduce attainment gaps between male and female learners to insignificant levels. Consequently, stakeholders need to re-examine and effectively implement our commitments to achieving inclusive education for all learners regardless of gender, school type, location and subjects.

STEAM (Science Technology Engineering Arts & Math) Education

68047 | *Lecturers' Experiences in Teaching STEM Courses Online During COVID-19: Case of a Zimbabwean University*
Sibusisiwe Dube, National University of Science and Technology, Zimbabwe
Belinda Ndlovu, University of South Africa, South Africa
Sinokubekezela Princess Dube, National University of Science and Technology, Zimbabwe

This research explains the university lecturers' experiences during the coronavirus (COVID-19) pandemic. While this research acknowledges the existence of literature on the teaching conditions during COVID-19, it also recognises the gap of limited literature on lecturers' experiences in teaching of Science, Technology, Engineering Mathematics (STEM) courses online. It is therefore, imperative to fill this gap by presenting these experiences and using them as guidelines during situations that demand the quick transitioning to online-based STEM education particularly where there is neither ample time nor frameworks to guide the smooth switch towards online classes. This quantitative study based on a single university case shows how Structuration Theory's structures of domination, legitimation and signification influence transitioning from physical to online teaching methods. An understanding of these structures as experienced by the university lecturers afford the university management and the higher education institutions' policy makers to formulate education policies that support online teaching methods to align with the new normal such as was the case during the COVID-19 pandemic where educational institutions were forced to quickly turn to online STEM classes. The paper concludes with a causal loop diagram of concepts that positively or negatively affect transitioning to teaching STEM classes online. These findings will have both practical and theoretical implications on policy makers as they present the guidelines for transitioning from physical classes towards teaching STEM courses virtually.

69584 | *The Effect of an Educational Technology Program Approach on Students' Attitude Towards Problem Solving*
Sabariah Sharif, University Malaysia Sabah, Malaysia
Thiwagar Muniandy, University Malaysia Sabah, Malaysia
Muralindran Mariappan, University Malaysia Sabah, Malaysia

This research intends to investigate the effect of an educational technology program approach on students' attitude towards problem solving. Quantitative research with the quasi-experimental model (pre-test & post-test) was used in the study to outline the research design and questionnaire technique was administered for data collecting from experiment and control group. The samples were 10 years old (Year 4) primary schools' students from Selangor and Malacca state in Malaysia with a total sample of 500 students. Inferential statistical test, Multivariate Analysis of Variance (MANOVA) with significance value 0.05 was performed using SPSS 25 to analyze the data. Based on data and discussion that have been accomplished, it can be concluded there is a significant difference on students' attitude towards problem solving in experimental group after attending educational technology program over control group who did not participate in educational technology program and only experiences traditional learning method. Educational technology program approach that has been used in this study was robotic program. This robotic program is suggested as one of the innovative STEAM and game based program, based on constructivism which is advised for enhancing problem solving skills. Excellent problem solving skill will assist students in resolving contextual and complex problems.

ERI2023 Pre-Recorded Virtual Presentations

STEAM (Science Technology Engineering Arts & Math) Education

69870 | *The Elements of Employability 4.0 Hearing Impaired Special Education Student in Malaysian Polytechnic From the Perspective of Lecturers and Employers*

Fathullah Ahmad, Universiti Teknologi Malaysia, Malaysia

Hanifah Jambari, Universiti Teknologi Malaysia, Malaysia

Saffuan Saad, Universiti Teknologi Malaysia, Malaysia

The use of IR 4.0 digital technology, computer and smartphone that grow rapidly and replace job scope demand required hearing impaired special education students at Malaysian polytechnic to obtain and master the digital skill in line with employer's need. Therefore, this study was conducted to identify the elements of employability 4.0 for special needs student hearing disability from both lecturer and employer perspective. This study was conducted using quantitative method and data has been analysed using SPSS version 26 software. The instrument has been given to respondent through a questionnaire and already been certified by two experts. This study involves 71 lecturers and 84 employers who offer the place to special needs student hearing disability for industrial training. The result shows high mean value from the lecturer's sample and proof that student already has digital skill 4.0 which is 4.08 compared to digital knowledge 4.0 with mean value 3.98. From employer's sample also show that mean value for digital skill 4.0 which 4.22 more than digital knowledge 4.0 with 4.15. Results from inferential analysis showed that there is a different significance in teaching experience hearing impaired special education students by lecturer. Hence, lectures in Malaysian polytechnic must have enough experience in digital technology usage and teaching to ensured hearing impaired special education students obtained elements of employability 4.0 in line with the employer's wishes.

69872 | *Visualizing Convergence or Divergence: Exploring Applied Mathematics Students' Understanding of Infinite Series Using Direct Comparison Test*

Guinever Vera, Ateneo De Manila University, Philippines

Catherine Vistro-Yu, Ateneo De Manila University, Philippines

Infinite series is one of the topics that most undergraduate students find difficult to understand. Due to its abstract nature, students have difficulty visualizing and manipulating them. As part of an ongoing dissertation project, the current research focuses on students' understanding of the convergence or divergence of infinite series using direct comparison test (DCT). Specifically, it aims to investigate how students utilize their prior constructs to build a new mathematical construct about the concept of convergence or divergence using DCT. The study employs a qualitative research methodology, where three Applied Mathematics students were separately interviewed and asked to verbally express their thought processes as they solve the task. Preliminary results showed that students who possess the ability to visualize graphs tend to grasp the idea more efficiently compared to those who cannot visualize. Moreover, those students who had the ability to visualize the graphs of the functions found it easier to handle algebraic manipulations of comparing infinite series and demonstrated deeper understanding of the concept. This paper can provide insights into the role of visual representations and algebraic manipulations in the students' understanding of the convergence or divergence of infinite series.

Workplace Learning

68362 | *Implementing Flipped Classroom for Chinese Intellectual Property Lawyers*

Dan Liu, University of the Cordilleras, Philippines

Marcelino M. Agnawa Jr., University of the Cordilleras, Philippines

Flipped classroom is one of the alternative learning modalities beyond simply delivering lectures in the classroom and assigning homework for students at home. During the COVID-19 pandemic, Wusong Law School, a commercial educational institution for Chinese lawyers, initiates the flipped classroom where both distance e-learning prior to the class and online collaborative activities are integrated in the Intellectual Property Law Department. This paper assesses the best practices and challenges to Wusong Law School in the implementation of flipped classroom, which have been determined with the thematic approach. This research suggests that flipped classroom could promote student engagement, improve learning independence and self-control, and enhance student-teacher relationship. It also reveals that the students and teachers undertake the challenges of technical problems, time intensive preparation and procrastination. Law schools need to establish a sustainable flipped classroom model in consideration of the potential best practices and the worldwide spread of COVID-19, by reshaping the classroom in a collaborative, independent and customized way, proving technical supports, well-planned preparation and time management guidance for students. This paper shall be significant and beneficial to law schools and law firms to assess current practices and gain insights into how to improve their education strategy to meet the needs of law students during the pandemic of COVID-19. For future researchers, it can be referred to as a foundation and basis for further studies about alternative learning modalities implemented by educational institutions of law.

68989 | *Twenty First Century Digital Skills Required in Workplaces: A Case From Kingdom of Saudi Arabia*

Jawaher Alghamdi, Imam Abdulrahman Bin Faisal University, Saudi Arabia

Samah Zakareya Ahmad, Imam Abdulrahman Bin Faisal University, Saudi Arabia

Gehan Ahmed Alshafey, Imam Abdulrahman Bin Faisal University, Saudi Arabia

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Fatma Mostafa Essa, Imam Abdulrahman Bin Faisal University, Saudi Arabia

Seham Mahdi Alzahrani, Imam Abdulrahman bin Faisal University, Saudi Arabia

This study sets out to explore types and level of digital skills required in workplaces in Kingdom of Saudi Arabia (KSA) and impacts digital skills gap. A descriptive study was conducted to achieve the study objective. A total of 300 workplaces in the eastern area of KSA participated in this study. The results show that Saudi workplaces are now using various digital technologies. It also set of 25 digital skills are highly important for workers in the Saudi workplaces. Further, the results show that the digital skills gap have major impacts in workplaces. Consequently, the study suggests a conceptual framework includes definitions and classifications of digital skills. It recommends using this framework as a guide to improve educational programmes and include digital skills as core competencies to all level of education. It also recommends improving teaching practices and support teachers and trainers to use technologies in daily teaching and learning practices.

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May 26–29, 2023

The Asian Conference on Arts & Humanities
The Asian Conference on the Social Sciences

November 22–25, 2023

The Asian Conference on Education

March 21–25, 2024

The Asian Conference on Psychology
& the Behavioral Sciences

The Asian Conference on Aging & Gerontology

March 25–29, 2024

The Asian Conference on Education &
International Development

Paris

June 16–19, 2023

The Paris Conference on Education
The Paris Conference on Arts & Humanities

London

July 13–17, 2023

The European Conference on Education
The European Conference on Language Learning
The European Conference on Arts & Humanities
The European Conference on Aging & Gerontology

Barcelona

September 19-23, 2023

The Barcelona Conference on Education
The Barcelona Conference on Arts, Media & Culture

Kyoto

October 10–13, 2023

The Asian Conference on Media, Communication & Film
The Kyoto Conference on Arts, Media & Culture

Honolulu

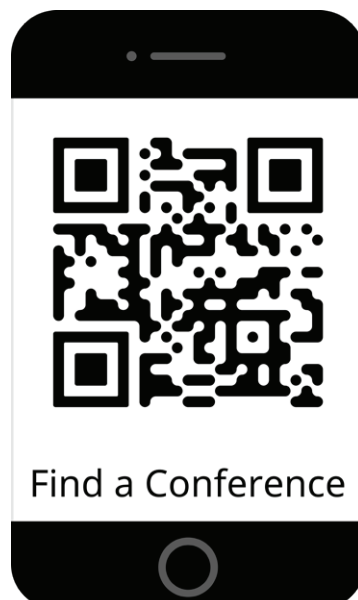
January 4-7, 2024

The IAFOR International Conference on Education
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Humanities

Chiang Mai

February 15-19, 2024

The Southeast Asian Conference on Education



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