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UNIVERSITAS INDONESIA Veritas, Probitas, Justitia | Est. 1849

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URBAN INCD INCERC

IAFOR has entered into a number of strategic partnerships with universities across the world to form the IAFOR Global Partnership Programme. These academic partnerships support and nurture IAFOR's goals of educational cooperation without borders, connecting the organisation with institutions that have an international and internationalising profile, and a commitment to interdisciplinary research.

The IAFOR Global Partnership Programme provides mutual recognition and scope for Global Partner institutions and organisations to showcase their research strengths, as well as engage in the development of projects and programmes with IAFOR.

/iaforjapan

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www.ace.iafor.org

Conference Theme:
"Independence & Interdependence"

The 2019 conference theme for The 11th Asian Conference on Education is "Independence & Interdependence", and invites reflections on the desirability, extent and limits of our individual independence and autonomy, of that of our students, and of the institutions and structures within which we work, teach and learn. We do not educate, and are not educated, in vacuums, but in such contexts and constraints as families, groups, and societies; of nations and cultures; of identities and religions; and of political and financial realities.

Ever changing technologies offer new ways for us to be independent and autonomous learners, encouraging students to be self-directed and confident in making choices, and enabling and empowering students and teachers to be proactive and tailor content. However, myriad technologies and services make us more dependent on the very things allowing autonomy. How do we help students and teachers alike navigate and curate the vast information available? How do we encourage individual growth while also underlining the importance of belonging and of the reciprocal responsibilities and privileges of education? How do we help students build the skills and attitudes necessary for positive engagement in distributed, globalised communities that so often lead to polarisation and alienation instead? How do we educate with independence and interdependence in mind?

Letter of Welcome

Welcome to Japan, to the great city of Tokyo, and to The Asian Conference on Education (ACE)!

Now in its 11th year, ACE, and the associated Asian Undergraduate Research Symposium (AURS), will see a combined total of over 600 delegates, from more than 40 countries, making it Japan's largest, and one of Asia's leading conferences on education.

Through IAFOR's unique global platform, including the OSIPP-IAFOR Research Centre at Osaka University and our partners across the world, we continue to engage in many global cross-sectoral events, projects, and interdisciplinary initiatives that will have an important impact on domestic and international public policy conversations and outcomes.

Recent and ongoing projects include those engaging leading universities (Virginia Tech, UCL, Singapore Management University, University of Belgrade, Lingnan University, Barcelona University, University of Hawai'i, Moscow State University); think tanks; research organisations and agencies (the East-West Center, The Center for Higher Education Research, The Asia Pacific Higher Education Research Partnership, The World Intellectual Property Organization); governments, and international governmental organisations (Government of Japan through the Prime Minister's Office, the United Nations in New York); and global media (*The Wall Street Journal*, JWT, HarperCollins).

This conference will generate discussion around specific subject areas, with the goal of generating new knowledge and understanding, and forging and expanding new international, intercultural and interdisciplinary research networks and partnerships. We hope and expect that much of this work will be developed and shared as part of the Open Access IAFOR Research Archive, through either the official conference proceedings, or one of our peer-reviewed journals.

Since its founding in 2009, IAFOR has brought more than 30,000 people together across its events around the world to promote and celebrate interdisciplinary study, and underline its growing importance. I have no doubt that ACE will again prove a remarkable opportunity for the sharing of research and best practice, and for the meeting of people and ideas.

I look forward to meeting you all.

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
Member, Expert Network, World Economic Forum

Organising Committee

Tien-Hui Chiang
Zhengzhou University, China

Joseph Haldane
IAFOR

Tzu-Bin Lin
National Taiwan Normal University, Taiwan

Yvonne Masters
Independent Researcher, Australia

José McClanahan
Creighton University, USA

Justin Sanders
Temple University, Japan Campus

Zachary Walker
Institute of Education, University College
London (UCL), UK
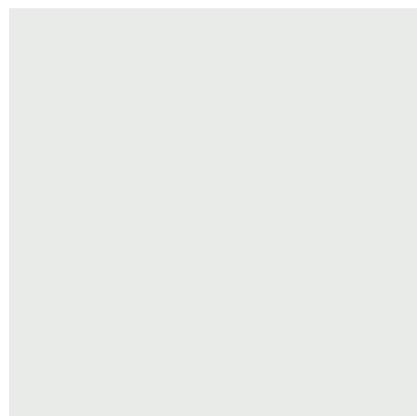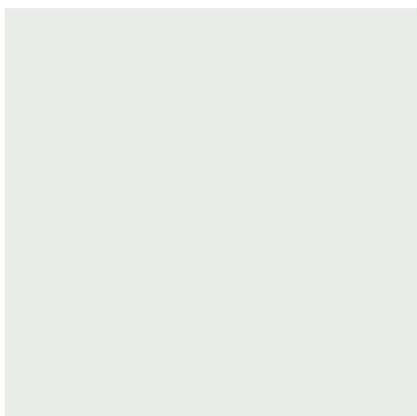
Conference
Guide

October 31, 2019 | Toshi Center Hotel
Thursday at a Glance

15:30-18:00   Conference Registration | Subaru Foyer (5F)

16:00-17:15   **Pre-Conference Workshop | Subaru (5F)**
                Writing for Publication: Methods to Maximise Your Chances
                Yvonne Masters, Editor of the *IAFOR Journal of Education*, Australia

18:00-19:00   **Conference Welcome Reception | Subaru (5F)**

November 01, 2019 | Toshi Center Hotel
Friday Morning at a Glance

08:15-09:00   Conference Registration | Room 701 (7F)

09:00-09:05   **Opening Announcements | Orion Hall (5F)**
Brian Aycock, IAFOR, Japan

09:05-09:20   **Welcome Addresses | Orion Hall (5F)**
Steve Cornwell, IAFOR & Osaka Jogakuin University, Japan
Joseph Haldane, IAFOR, Japan

09:20-09:30   **Recognition of IAFOR Scholarship Winners | Orion Hall (5F)**
Steve Cornwell, IAFOR & Osaka Jogakuin University, Japan

09:30-10:00   **Keynote Presentation | Orion Hall (5F)**
Plenary Learning: Harnessing Technology to Support Independence and Interdependence to Maximize Learning for All
Michael Menchaca, University of Hawaii at Manoa, USA

10:05-10:35   **Keynote Presentation | Orion Hall (5F)**
Emerging Education with Social Robots
Hidenobu Sumioka, Hiroshi Ishiguro Laboratory, ATR, Japan

10:35-11:00   Coffee Break | Room 701 (7F)

Friday schedule continued on the following page.

November 01, 2019 | Toshi Center Hotel
Friday Afternoon at a Glance

11:00-12:00   **Keynote Panel | Orion Hall (5F)**
Academic Governance/Management/Administration
in Higher Education in Asia
Grant Black, Black, Inc., Japan
Justin Sanders, Temple University, Japan
Lisa Lam, Hong Kong Baptist University, Hong Kong
Wei Shin Leong, National Institute of Education, Singapore
Tsediso Michael Makoelle, Nazarbayev University, Kazakhstan
Reiko Yamada, Doshisha University, Japan

12:00-12:10   Conference Photograph

12:10-13:10   Lunch

13:10-14:50   **Parallel Session I**

14:50-15:05   Coffee Break

15:05-15:55   **Parallel Session II**

15:55-16:00   Short Break

16:00-17:00   **Conference Poster Session | Orion Hall (5F)**

18:00-20:00   **Official Conference Dinner (optional extra) | Torimero**
Meet in the Toshi Center Hotel lobby at 17:15

November 02, 2019 | Toshi Center Hotel
Saturday at a Glance

09:00-10:15	**Parallel Session I**
10:15-10:30	Coffee Break
10:30-12:10	**Parallel Session II**
12:10-13:10	Lunch Break
13:10-14:50	**Parallel Session III**
14:50-15:05	Coffee Break
15:05-16:45	**Parallel Session IV**

November 03, 2019 | Toshi Center Hotel
Sunday at a Glance

09:00-10:40	**Parallel Session I**
10:40-11:00	Coffee Break
11:00-12:15	**Parallel Session II**
12:15-13:15	Lunch Break
13:15-14:30	**Parallel Session III**
14:30-14:45	Coffee Break
14:45-16:25	**Parallel Session IV**
16:30-16:45	**Closing Session**

Friday Schedule | November 01, 2019

	08:15-09:00	09:00-12:10	12:10-13:10	13:10-14:50	14:50-15:05	15:05-15:55	15:55-16:00	16:00-17:00	18:00-20:00
Room 707	–	–	Lunch	Community Education	Coffee Break	Workshop Presentation	Short Break	–	Conference Dinner (Optional Extra)
Room 705	–	–	Lunch	Workshop	Coffee Break	Workshop Presentation	Short Break	–	Conference Dinner (Optional Extra)
Room 704	–	–	Lunch	Technology in Education	Coffee Break	Workshop Presentation	Short Break	–	Conference Dinner (Optional Extra)
Room 701	Registration & Coffee	–	Lunch	–	Coffee Break	Symposium	Short Break	–	Conference Dinner (Optional Extra)
Room 608	–	–	Lunch	School Principals	Coffee Break	Student Finance	Short Break	–	Conference Dinner (Optional Extra)
Room 607	–	–	Lunch	Mathematics Education - Cognitive Skills	Coffee Break	Learning Management System	Short Break	–	Conference Dinner (Optional Extra)
Room 605	–	–	Lunch	Assessment	Coffee Break	English as a Foreign Language	Short Break	–	Conference Dinner (Optional Extra)
Room 604	–	–	Lunch	Panel Presentations	Coffee Break	Literacy	Short Break	–	Conference Dinner (Optional Extra)
Orion	–	Plenary Session	Lunch	Panel Presentations	Coffee Break	–	Short Break	Poster Presentations	Conference Dinner (Optional Extra)

Time	Room 601	Room 603	Room 604	Room 605	Room 607	Room 608	Room 609	Room 703	Room 704	Room 705	Room 707
09:00-10:15	Education & Difference	Teaching Students with ASD	Language Learning- Writing	Student Teachers	Teaching Experience: Social Sciences & Humanities	Higher Education	Religion in Education	Environmental Education & Natural Disasters in the Classroom	Art & Music in Education	Early Childhood Education: Technology	Learning Experiences: Biology
10:15-10:30	Coffee Break										
10:30-12:10	High School Education	Professional Training - Communities of Learning	Language & Cultural Identity	School Leadership	Developing Critical Thinking Skills	Accessibility & Inclusion	Student Perceptions	Internationalization of Education	Interdisciplinary Education: Curriculum Design	Early Childhood Education	Learning Experiences: STEM Education
12:10-13:10	Lunch										
13:10-14:50	–	–	Language Learning - Vocabulary	Teacher Education	Mind & Brain	Inclusion	Ethnography	Internationalization of Education	Higher Education: Flipped & Blended Classrooms	Early Childhood Education	Policy
14:50-15:05	Coffee Break										
15:05-16:45	Assessment	Quality Assurance & Accountability	Language Learning - Speaking	Professional Development: School Staff	Education Policy: Operating Educational Institutions	Science Education	Student Autonomy	International Education	Lifelong & Online Education	Innovations in Learning & Teaching	Teaching Experiences: Mathematics Education

Sunday Schedule | November 03, 2019

	Room 601	Room 603	Room 604	Room 605	Room 607	Room 608	Room 609	Room 704	Room 705	Room 707
09:00-10:40	AURS	Learning Experiences	Inclusive Education	Professional Development for Teachers	Workplace Education	Visual Learning	International Education: Students	Technology in Education	Teaching Students with ASD	Learning Experiences: Mathematics & Science Education
10:40-11:00	Coffee Break									
11:00-12:15	AURS	Technologies in Education	Teaching and Learning: Observing the Class	Language Learning: Methodology	Education & Employment		Student Performance	Technology in Education: Mathematics	At-risk & Special Needs Education	Politics in Education
12:15-13:15	Lunch									
13:15-14:30	AURS	–	–	–	Pedagogy of Art & Design	Teaching Strategies	Teaching Experiences: Student Roles	International Education: Teaching Abroad & Migrant Teachers	Language Learning: Computer Assisted	Online Education
14:30-14:45	Coffee Break									
14:45-16:25	AURS	Education & Employment	Higher Education: Curriculum Design	Language Learning: Tools for Learners	Learning Experiences: Student Character & Leadership	Assessment	Teaching Experiences: Leadership for Diversity & Inclusion	Teacher Training	Learning Experiences: Student Perceptions	Language Learning: Japanese as a Second Language
16:30-16:45	AURS	Closing Session	–	–	–	–	–	–	–	–

Thursday, October 31 | 18:00-19:00 | Subaru (5F)

Conference Welcome Reception

Join fellow delegates for a drink or two at the Conference Welcome Reception. This event provides a great opportunity for delegates to network and get to know each other. All registered presenters and audience members are welcome to attend. Admission is included in the conference registration fee.

The Welcome Reception will be held in the Subaru room on the fifth floor at 18:00.

Lunch & Dinner

Lunch on Friday, Saturday and Sunday is included in the conference registration fee. Lunch is by pre-reservation only and is available at the below times. If you ordered lunch, you can come to the registration desk and collect your lunch box.

Lunch Times

Friday, November 01	12:10-13:10	Room 701 Foyer (7F)
Saturday, November 02	12:10-13:10	Room 601 Foyer (6F)
Sunday, November 03	12:15-13:15	Room 603 Foyer (6F)

Conference Dinner

The Conference Dinner is a ticketed optional event (5000 JPY) on Friday, November 01.

The Conference Dinner is held in a private function room at a restaurant near the conference venue, and offers conference participants an excellent chance to enjoy delicious food in a relaxed setting while getting to know each other and making new connections outside the main conference environment.

Conference Dinner attendees should meet in the Lobby (1F) of the Toshi Center Hotel at 17:15 on Friday, November 01. The group leaves for the restaurant at 17:30. Please remember to bring your name tag to the Conference Dinner. Dinner starts from 18:00.

Restaurant name: Torimero (Sandaime Torimero Hanzoumon Branch)
三代目鳥メロ　半蔵門
Restaurant address: Kojimachi Palace Building B1 Floor, Kojiimachi 2-14, Chiyoda-ku, Tokyo
東京都千代田区麹町2-14麹町パレスビルB1階
Website: https://torimero.com/hanzoumonekimae/access/

Toshi Center Hotel
Directions & Access

The Toshi Center Hotel Tokyo is located in the Nagata-cho business district of Tokyo. Access to the hotel is convenient by Tokyo Metro from Nagatacho Station, Kojimachi Station and Akasaka-mitsuke Station.

From Narita International Airport
By Rail

1. From Narita Airport (all terminals) take the Narita Express to Tokyo Station.
2. Transfer to the JR Yamanote Line (Clockwise towards Shinagawa) from Tokyo Station and get off at the next stop, Yurakucho Station (JY30).
3. From Yurakucho Station transfer to the Tokyo Metro Yurakucho Line (Y18).
4. Get off at Nagatacho Station (Y16).
5. Exit the station at exit 9b and cross the street. Follow the walkway straight for about 100 meters. The Toshi Center will be on your right, and there are signs in both Japanese and English.

By Airport Limousine Bus

From Narita Airport take the airport limousine bus to Tokyo Garden Terrace Kioicho. Tokyo Garden Terrace Kioicho is located across the street from the Toshi Center Hotel.

From Haneda Airport
By Rail

1. Take Tokyo Monorail at Haneda Airport Station for Hamamatsucho Station
2. Transfer to the JR Yamanote Line at Hamamatsucho Station to Yurakucho Station
3. From Yurakucho Station transfer to the Tokyo Metro Yurakucho Line (Y18).
4. Get off at Nagatacho Station (Y16).
5. Exit the station at exit 9b and cross the street. Follow the walkway straight for about 100 meters. The Toshi Center will be on your right, and there are signs in both Japanese and English.

By Airport Limousine Bus

From Haneda Airport take the airport limousine bus to Tokyo Garden Terrace Kioicho. Tokyo Garden Terrace Kioicho is located across the street from the Toshi Center Hotel.

From within Tokyo

Take the Tokyo Metro to Nagatacho Station. Nagatacho Station (Y16, Z04, N07) is served by the Hanzomon Line (Z), Yurakucho Line (Y), and Namboku Line (N).

Exit the station at exit 9b and cross the street. Follow the road straight for about 100 meters, walking past the Junior High School. The Toshi Center will be on your right, and there are signs in both Japanese and English. Family Mart is on the left.

Address

Toshi Center Hotel 都市センターホテル
Hirakawa-cho 2-4-1, Chiyoda-ku, Tokyo 102-0093
〒102-0093 東京都千代田区平河町2丁目4-1
Tel +81(0)3-3265-8211
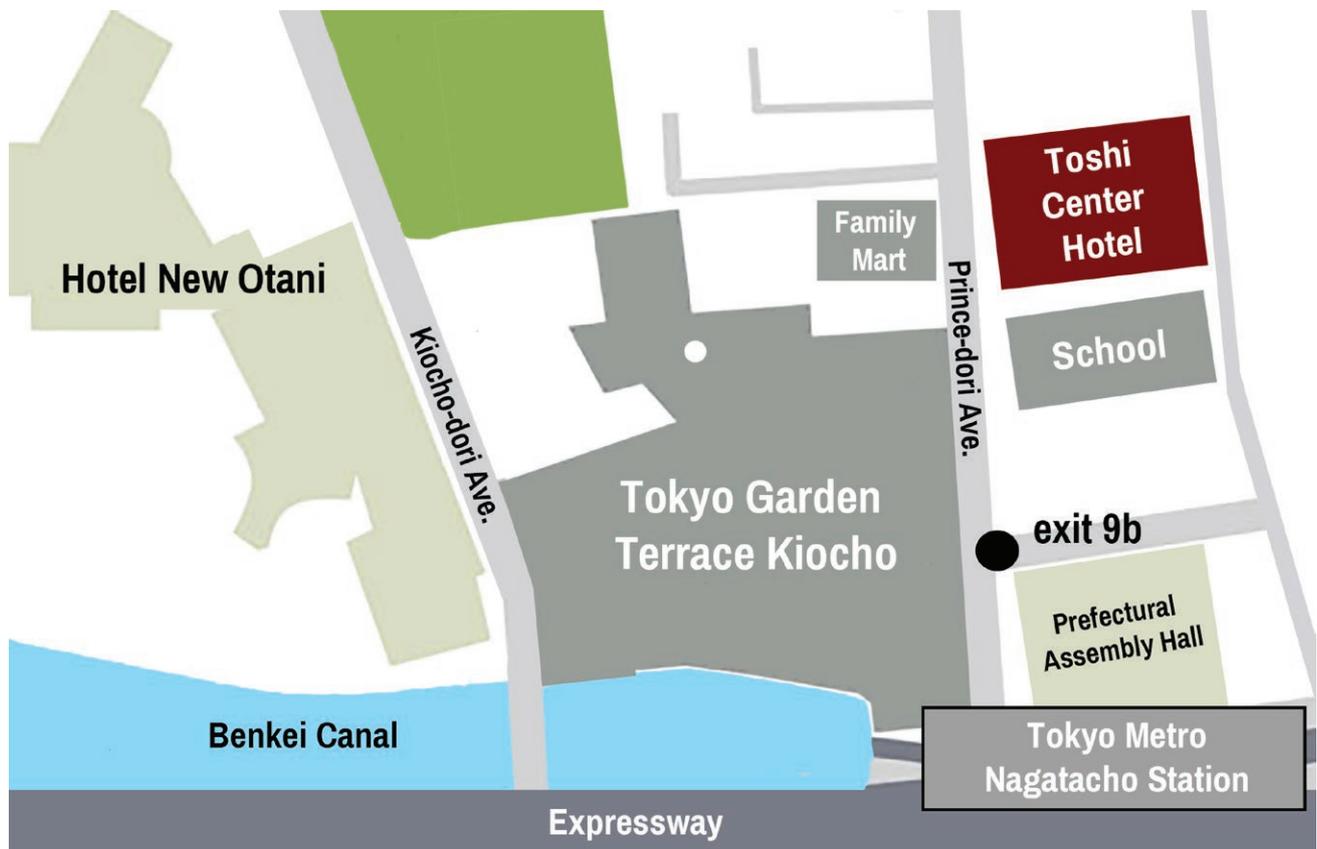
Toshi Center Hotel
Floor Guide

Second Floor | 2F

EV EV EV

Hotel Front Desk

Front Entrance →

Entrance Hall

Lounge

Iris Restaurant

EV EV EV

Fifth Floor | 5F

EV EV EV

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Orion

Subaru
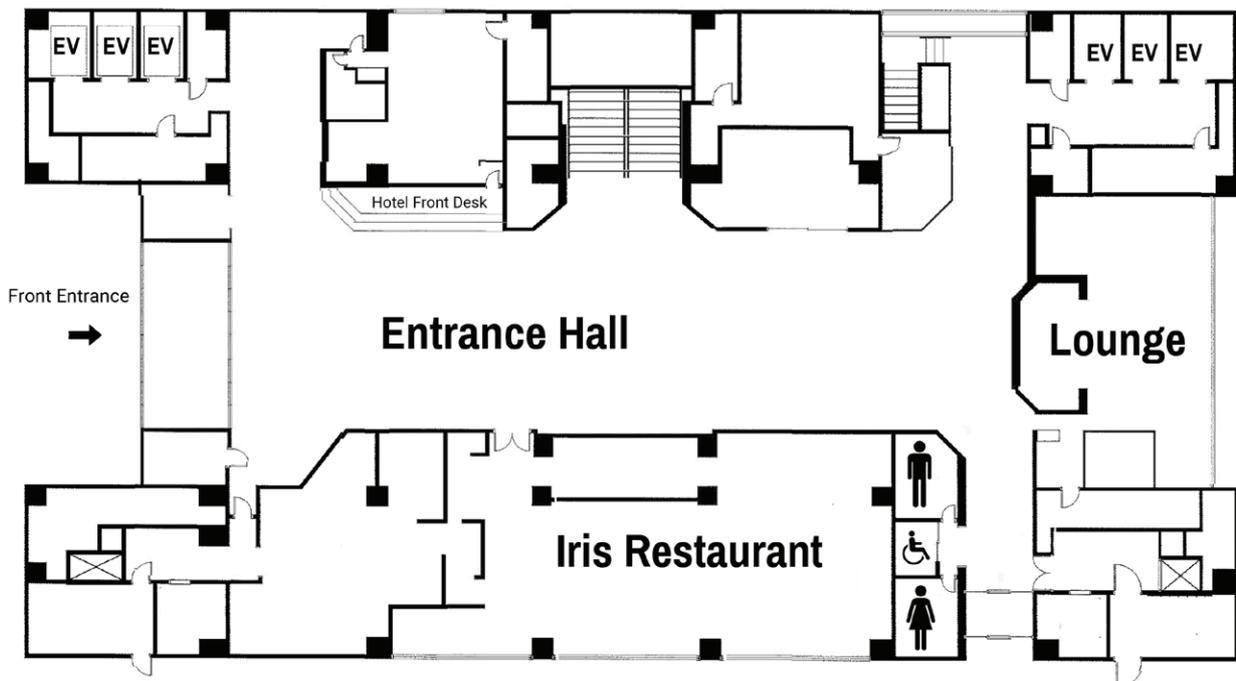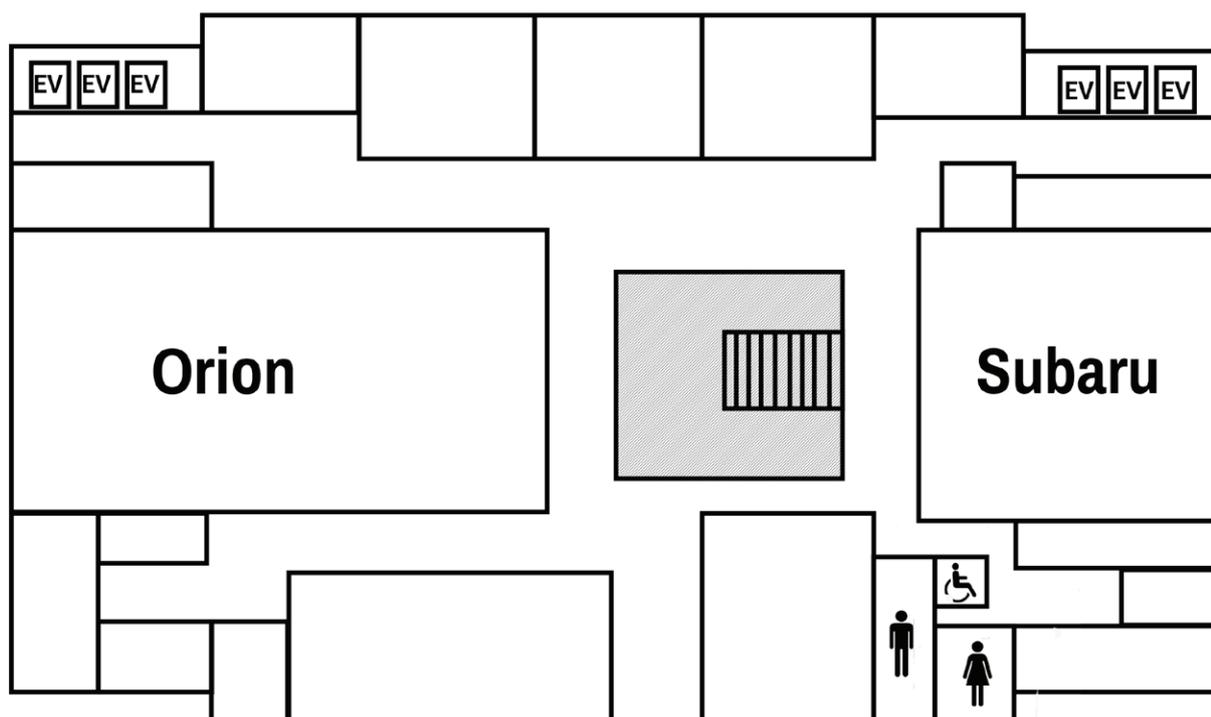
Sixth Floor | 6F
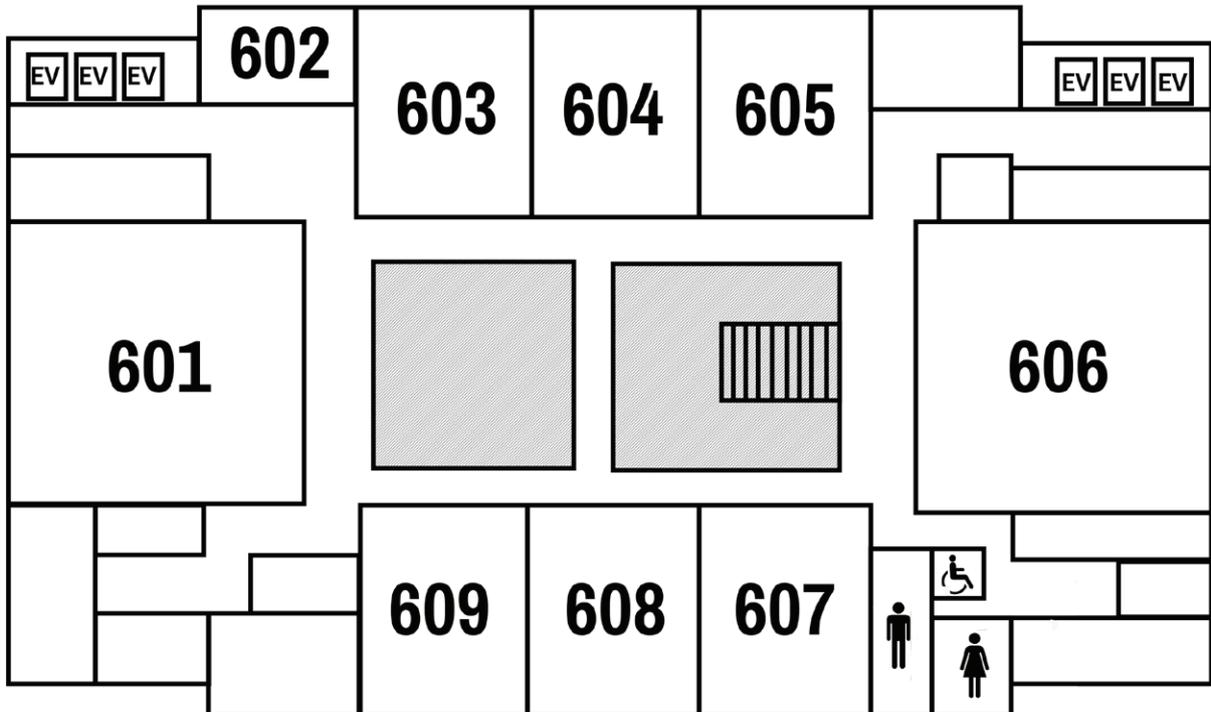
Seventh Floor | 7F
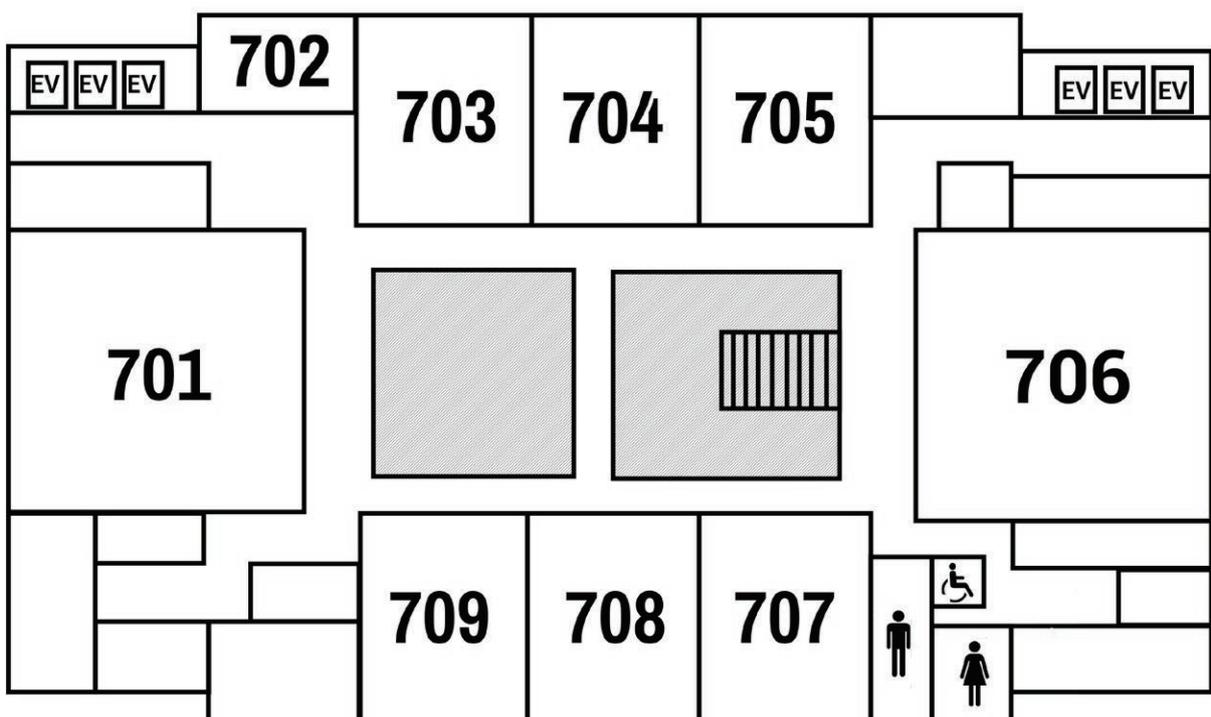
General Information

Registration Desk

You will be able to pick up your registration pack and name card at the Conference Registration Desk. The Conference Registration Desk will be situated at the following locations during the conference:

Thursday, October 31	15:30-18:00	Subaru Foyer (5F)
Friday, November 01	08:15-16:00	Room 701 (7F)
Saturday, November 02	09:00-16:00	Room 601 Foyer 6F)
Sunday, November 03	09:00-16:00	Room 601 Foyer (6F)

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

Publications Desk

The Publications Desk will be situated at the following locations during the conference:

Friday, November 01	13:30-14:30	Room 701 (7F)
	16:00-17:00	
Saturday, November 02	10:00-11:00	Room 601 Foyer 6F)
	14:15 -15:15	

The Publications Desk will not be available on Thursday or Sunday.

Name Badges

When you check in, you will receive a registration pack, which includes your name badge. Wearing your badge is required for entrance to the sessions. You must wear your badge at all times during the conference.

Internet Access

There is 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.

Instructions on how to connect to the Wi-Fi will be available at the registration desk.

General Information

Refreshment Breaks

Complimentary coffee, tea and water will be available during the scheduled coffee breaks. Light snacks will be provided once in the morning and once in the afternoon.

Smoking

Smoking is only permitted in designated areas.

What to Wear & Bring

Attendees generally wear business casual attire. You may wish to bring a light jacket or sweater as meeting rooms are air-conditioned and sometimes cool.

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 new 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**

Presentation Guide

Oral & Workshop Presentations

Oral Presentations are normally scheduled in sessions comprising three presentations, lasting 75 minutes in total. In sessions with two Oral Presentations, the session will last 50 minutes, and in the case of four Oral Presentations, an extended session lasting 100 minutes will be scheduled.

The time in the sessions is to be divided equally between presentations. We recommend that an Oral Presentation should last 15–20 minutes to include time for question and answers, but should last no longer than 25 minutes. Any remaining session time may be used for additional discussion.

Equipment

All rooms will be equipped with a MacBook computer pre-installed with PowerPoint and Keynote and connected to a LCD projector or LCD screen. If you wish, you may directly link your own PC laptop, although we advise you to use the computer provided by plugging in your USB flash drive. We recommend that you bring two copies of your presentation in case one fails, and suggest sending yourself the presentation by email as a third and final precaution.

Session Chairs

Session Chairs are asked to introduce themselves and other speakers (briefly) using the provided printouts of speaker bios, hand out the provided presentation certificates at the end of the session, ensure that the session begins and ends on time, and that the time is divided fairly between the presentations. Each presenter should have no more than 25 minutes in which to present his or her paper and respond to any questions. The Session Chair is asked to assume this timekeeping role, and to this end yellow and red timekeeping cards are used as a visual cue for presenters, letting them know when they have five minutes remaining, and when they must stop.

Please follow the order in the programme, and if for any reason a presenter fails to show up, please keep to the original time slots as delegates use the programme to plan their attendance.

Presentation Guide

Presentation Certificates

Presenters will receive a certificate of presentation from their Session Chair or a member of staff at the end of their session.

Conference Proceedings

The Conference Proceedings are published on the IAFOR website (**papers.iafor.org**), and can be freely accessed as part of IAFOR's research archive. All authors may have their full paper published in the online Conference Proceedings.

Full text submission is due by December 04, 2019 through the online system. The proceedings will be published on January 04, 2020. Authors will have PDF copies of their offprints emailed to them by February 04, 2020.

A Polite Request to All Participants

Participants are requested to arrive in a timely fashion for all presentations, whether to their own or to those of other presenters. Presenters are reminded that the time slots should be divided fairly and equally between the number of presentations, and that presentations should not overrun.

Participants should refrain from talking amongst themselves and ensure that mobile phones are switched off or set to silent mode during presentations.

Become an IAFOR Member

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

In a world where division and strife are underlined and played up in national and local contexts, and political posturing frequently seeks to ostracise and demonise, IAFOR is committed to working across cultural and national borders, and to work to bring people together. We believe that mature human interaction and academic and cultural exchange are essential to offering positive versions of the future, where cooperation happens with individuals and institutions who share a commitment to bridge divides, to being good global citizens, and to making the world a better place.

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

To learn more about IAFOR membership, please visit:
www.iafor.org/membership

The Reverend Professor
Stuart D. B. Picken (1942–2016)

The late Reverend Professor Stuart D. B. Picken began his distinguished career in academia as a Rotary Scholar on a research trip to Japan. A native of Scotland who had dedicated himself to religious studies, he immediately became fascinated by Japanese culture and the practice of Shinto. He was particularly drawn to the parallels and differences he saw in Western pedagogy compared to that of the East and began a lifelong mission to bridge the communication and knowledge gap between the two worlds.

Picken was appointed Professor of Philosophy at the International Christian University (ICU) in 1972. Here he turned his Western theological and philosophical training to comparative religious and cultural studies of Japan, at a time when the country was emerging from the shadows of the Second World War.

His groundbreaking and controversial work on suicide in Japan made his name within the country, but it was his subsequent work on Shinto that influenced the rehabilitation of the religion at a time when it was dismissed in the West as pagan and primitive, or unjustly caricatured for its wartime associations.

Whether in his research or teaching, Picken devoted much of his life to increasing understanding between his adopted country of Japan and the West, and in 2007 he was recognised with the Order of the Sacred Treasure, an imperial decoration for his pioneering research and outstanding contribution to the promotion of friendship and mutual understanding between Japan and the United Kingdom. He also served as the International Adviser to the High Priest of the Tsubaki Grand Shrine, one of Japan's largest and oldest shrines.

From 2009 he was the founding Chairman of The International Academic Forum (IAFOR), where he was highly active in helping nurture and mentor a new generation of academics, and facilitating better intercultural and international awareness and understanding.

Stuart D. B. Picken was a cherished friend and an inspiration to IAFOR and its community of supporters. In honour of Professor Picken and his dedication to academia, the ideals of intercultural understanding and the principles of interdisciplinary study, IAFOR has created the Stuart D. B. Picken Grant and Scholarship, an award supported by the Stuart D. B. Picken Memorial Fund. Awards are made to PhD students and early career academics who are in need of funding to complete their research, and whose work demonstrates excellence in the core values of academic rigour, intercultural sensitivity and interdisciplinarity.

Introduction

IAFOR's publications provide a constructive environment for the facilitation of dialogue between academics at the intersections of nation, culture and discipline. Since 2009, when the organisation was established, over 20,000 academics have presented their research at IAFOR conferences – a wealth of ideas have been generated and partnerships formed. Our various publications, from Conference Proceedings, to peer-reviewed journals, to our online magazine, provide a permanent record of and a global online platform for this valuable research. All of our publications are Open Access, freely available online and free of publishing fees of any kind. By publishing work with IAFOR, authors enter into an exclusive License Agreement, where they have copyright, but license exclusive rights in their article to IAFOR as the publisher.

Conference Proceedings

As a presenter at an IAFOR conference you are encouraged to submit a final paper to our Conference Proceedings. These online publications are Open Access research repositories, which act as a permanent record of the research generated at IAFOR conferences. All of our Conference Proceedings are freely available to read online. Papers should be uploaded through the submission system before the Final Paper Submission Deadline, which is one month after the end of the conference. Please note that works published in the Conference Proceedings are not peer-reviewed and cannot be considered for publication in IAFOR journals.

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.

Selected IAFOR Journals are available for purchase on Amazon. Search for The International Academic Forum (IAFOR).

What's the cost?

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THINK

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IAFOR Academic Grant
& Scholarship Recipients

Our warmest congratulations go to Somchay Makesavanh, Mohammad Arrafii and Qi Ying Lean, who have been selected by the conference Organising Committee to receive grants and scholarships to present their research at ACE2019.

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**

Somchay Makesavanh | Stuart D. B. Picken Grant and Scholarship Recipient

53285
Teaching Students With Autism Spectrum Disorder (ASD): An E-module for Teacher Training in the Lao People's Democratic Republic
Somchay Makesavanh, Souphanouvong University, Laos
Hui Min Low, Universiti Sains Malaysia, Malaysia
Lay Wah Lee, Universiti Sains Malaysia, Malaysia
Tze Peng Wong, University of Nottingham Malaysia, Malaysia
Ann Sien Sut Lee, Universiti Sains Malaysia, Malaysia
Bounthieng Vongsouangtham, Souphanouvong University, Laos

Ms Somchay Makesavanh (LAOS PDR) has been working as an English lecturer at Souphanouvong University since 2006. She works in the Office of International Relations and is responsible for the Department of Foreign Expert, Volunteer, and Student Management. She is a visiting English teacher at the Faculty of Languages and the Faculty of Architecture. She earned a Bachelor of Arts from the National University of Laos before completing a Master of Education (TESOL) from Universiti Sains Malaysia. She was a member of the Community of Practice Program, a program funded by the U.S. Department of State. Her current action research is on Using Storytelling to Improve Students' Vocabulary.

Mohammad Arrafii | IAFOR Scholarship Recipient

53053
Assessment for Learning in Indonesia: Exploration of Convergent and Divergent Teachers' Assessment Values and Practices
Mohammad Arrafii, University of Leicester, United Kingdom

Mr Arrafii is currently a PhD candidate in the School of Education at The University of Leicester. His research interests include student-centered pedagogy and assessment, curriculum development, assessment for learning, teacher learning and perception. He is also a teacher educator at Mataram Teacher Training Institute for Education, Lombok, Indonesia.

Qi Ying Lean | IAFOR Scholarship Recipient

53330
Online Versus Classroom Learning in Pharmacy Education: Student's Preference and Readiness
Qi Ying Lean, Universiti Teknologi MARA, Malaysia
Long Chiau Ming, Quest International University Perak, Malaysia
Chin Fen Neoh, Universiti Teknologi MARA, Malaysia
Yuet Yen Wong, Universiti Teknologi MARA, Malaysia
Maryam Farooqui, Qassim University, Saudi Arabia
Siti Nur Fadzilah Muhsain, Universiti Teknologi MARA, Malaysia

Dr Qi Ying Lean has studied consistently towards a career in the field of pharmacy. Having completed her degree in BPharm (Hons.) at the University of Malaya, she started to work as a pharmacist at Penang Hospital. She then pursued her master and doctorate degrees at the University of Tasmania, Australia. She is currently the Senior Pharmacy lecturer at Universiti Teknologi MARA. Having the passion in research and commitment to the understanding of human health, she has been involved in a number of research projects including pharmacy education, prevention and management of illnesses and drug discovery.

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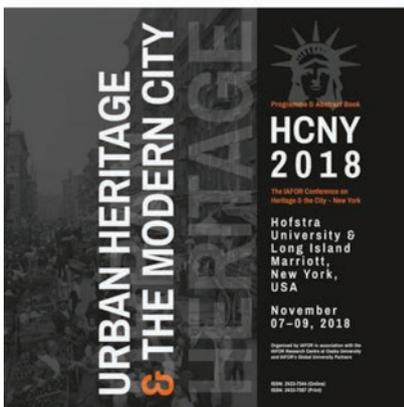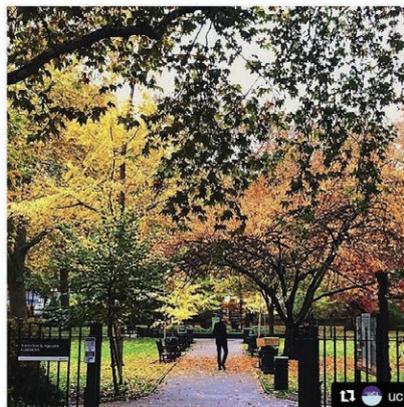
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Thursday
October 31

Pre-Conference Workshop

Researchers, from postgraduate students to experienced academics, are generally expected to publish their findings, usually in an academic journal. However, getting published can be a stressful undertaking and anyone submitting to a journal needs to understand that rejection happens. Most journals have a process of editorial review, before a paper is even sent to peer reviewers, and many papers are rejected at the first gate. So how can you increase your chances of acceptance?

In this workshop, using the *IAFOR Journal of Education* as an example whilst also referring to journals more generally, you will be taken through a number of aspects of presenting your work for publication. You will be provided with examples of what to do (and not do), have the opportunity to discuss your own tips for success, and to ask questions that are puzzling you.

While the main focus of the workshop is about maximising your chances of acceptance, it will conclude with an examination of how to respond to reviewers if you are given the opportunity of re-submitting a paper.

The workshop is applicable for anyone interested in discovering more about how to improve the chances of acceptance of a paper. It is relevant to the early postgraduate student as well as to more established academics.

Yvonne Masters

Yvonne Masters is an independent researcher in Australia. She has been involved with IAFOR for several years as a member of The Asian Conference for Education Organising Committee, as co-facilitator of The Asian Undergraduate Research Symposium, and as a member of the International Academic Advisory Board. Yvonne is the current editor of the *IAFOR Journal of Education*, a Scopus indexed, open access journal on education.

Yvonne was a teacher and teacher educator for over 40 years and is still passionate about education. She was a senior lecturer in Professional Classroom Practice in the School of Education, University of New England, Australia, a position that she accepted after five years as Director of Professional Experience in the same School. Prior to taking up her position at UNE, she had 30 years' experience in secondary schools including in the roles of Curriculum Coordinator, Deputy Principal and Principal. Her teaching experience spans three Australian states. Her research interests centre on undergraduate research, academic publication, teacher education and policy, professional experience, teacher identity, online learning and virtual worlds. Yvonne was awarded her PhD, focused on school principalship, from Deakin University.

She is an active researcher and gained, in collaboration with other researchers, 4 Internal UNE School of Education Research grants; was a partner in a $200,000 ALTC (OLT) grant, VirtualPREX: Innovative assessment using a 3D virtual world with pre-service teachers; in 2014 achieved a UNE Seed Grant for a one year project to explore teacher quality; and in 2015 gained a $50,000 OLT seed grant to develop resources to assist pre-service teachers to gain online teaching skills to assist them in teaching wholly online into virtual schools.

Yvonne serves as a reviewer for several education journals and is a senior reviewer for IAFOR conferences. She presents on a variety of education topics including publishing as an academic, teacher education policy, undergraduate research, and online teaching at a range of conferences, both Australian and international.

Friday
November 01

Plenary Session

Plenary Learning: Harnessing Technology to Support Independence and Interdependence to Maximize Learning for All

Friday, November 01 | 09:30-10:00 | Orion Hall (5F)

Many of us have heard the term plenary to describe a conference session. But what does that really mean? Plenary can be defined two ways: Complete in every aspect and fully attended by all entitled to be present. Thus, in regards to a conference, a plenary session is one that every registrant is entitled to attend and there should not be competing sessions at the same time. In its more general definition, plenary refers to totality: For example, plenary power, which is power complete and boundless.

From an educational standpoint, plenary learning should be something we strive for: complete and boundless education for all. While I do not purport to provide ultimate answers to centuries old, deeply philosophic ruminations about the nature of knowledge, I will provide a model for how technologies can afford understanding in complex learning environments.

To that end, the session will focus on the conference theme and provide a model for and examples of technologies that support both independence and interdependence and ultimately "encourage individual growth while also underlining the importance of belonging and of the reciprocal responsibilities and privileges of education.

Michael Menchaca

Professor Michael Menchaca currently coordinates online and hybrid programs in the Department of Learning Design and Technology at the University of Hawaii at Manoa. He has taught at the University of Hawaii for over ten years. He previously taught in and coordinated online programs at Sacramento State University. 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.

Recent advances in robotic technologies enable robots to support us in our daily activities such as social interactions. Such robots, called social robots, often make us interact in more intuitive and casual ways than a real human because of the lack of nonverbal cues and demographic messages. Thanks to this characteristic, they are just beginning to be applied to various fields of social interaction such as education. In this talk, I will present the potential applications of social robots in education, introducing three aspects. First, social robots can easily change their relationship with us by playing different roles. They can become our teachers, our students, and our peers, depending on their social contexts. Second, by referring to our field experiment with a teleoperated android, I will show that they can facilitate human-human communication and can also provide opportunities for us to improve communication skills. Finally, I will present the physical embodiment of the robot that enables us to overcome our limitation to build social bonds with people and provide us with a new way of making close human relationships.

Hidenobu Sumioka

Dr Hidenobu Sumioka is attached to the Hiroshi Ishiguro Laboratory in ATR, Japan, where he is the group leader of Presence Media Research Group. This group makes use of presence media technologies such as Hugvie, a cushion with a minimalistic human-shape design that transmits human presence, that integrate tactile information and remote conversation in order to improve interaction and reduce stress. With the collaboration of the industry consortium, this technology aims to create new business areas such as remote counseling.

Dr Sumioka is an invited Associate Professor in the Intelligent Robotics Laboratory, Department of Systems Innovation at the Graduate School of Engineering Science, Osaka University. He is also an Invited Associate Professor at the Graduate School of Intercultural Studies at Kobe University. He has also been a senior assistant at Artificial Intelligence Laboratory, Department of Informatics, University of Zurich, Switzerland, and a fellow of Japanese Society for the Promotion of Science (JSPS).

Academic Governance/Management/ Administration in Higher Education in Asia

Friday, November 01 | 11:00-12:00 | Orion Hall (5F)

For universities to compete in the global marketplace, excellence in research and teaching are standard principles. Increasingly, operational efficiency is added to that list. Along with the global trend toward convergence around these standards, it is now commonplace to expect faculty members who lead a campus, department or program, additionally to be excellent in leadership, strategy and management. The skills of research and teaching do not necessarily align well with those needed for leadership and management. The need is pressing for hybrid individuals with both academic and administrative expertise.

Challenges in academic management are pervasive in tertiary education worldwide.

Particularly in Asia, often historic management practices – university-wide and at all levels of operations – are likely to differ in organisational culture from management principles adopted through university reform. Differences between governance and management, and the role of faculty (both as individuals and as a body) place new demands on the organisation. Is there a gap between policy and implementation? In the rapid shift to new governance and academic management models, to what extent has the historic foundation of university administration remained in place while only adopting the nomenclature and surface appearance of reform? How can we evaluate the translation of reform policy on the macro and micro levels of government policy, institutional reform, departmental practices, and student learning outcomes? In the Asian context, are there country differences in approach to training and support for academic management? This expert panel of practitioners will engage in a lively discussion around these timely questions.

Grant Black

Grant Black DSocSci CMgr FCMI FRSA Dr Grant Black is President of Black Inc. Consulting (Japan), a business & university global strategic management firm based in Tokyo. He holds a BA Highest Honors in Religious Studies from the University of California, Santa Barbara; an MA in Buddhist Studies from the University of California, Los Angeles; and a Doctor of Social Science (DSocSci) from the Department of Management in the School of Business at the University of Leicester. Grant began his management training at Hyatt and has a career trend as global manager, systems builder, executive leader and university professor. Most recently he held a six-year post as an associate professor in the Faculty of Humanities and Social Sciences at the University of Tsukuba. Research areas: global management skills, intercultural intelligence (CQ) and organisational management. Dr Black is a Chartered Manager (CMgr), the highest status that can be achieved in the management profession in the UK. In 2018, he was elected a Fellow of the Chartered Management Institute (FCMI) and Fellow of the Royal Society of Arts (FRSA).

Dr Grant Black is a Vice-President (at large) of IAFOR and Auditor of the organisation. He is a member of the Business & Economics section of the International Academic Advisory Board.

Justin Sanders

Justin Sanders has worked in a range of educational settings globally. Most recently he served in Singapore as Global Recognition Manager for the International Baccalaureate (IB), helping the organisation build bridges with higher education institutions around the world and improving postsecondary pathways for more than 100,000 IB students annually. Before relocating to Singapore, he spent several years with the IB's research department in Washington, DC, investigating and communicating the impact of an IB education. During his time at the Association for Community College Trustees, he assisted community college boards and senior administrators around the United States in improving their institutional governance and administration. Prior to moving to Washington, he served for two years as an education volunteer with the United States Peace Corps in Azerbaijan, where he worked on improving educational infrastructure and capacity in a small rural community. Throughout his career, he has helped to organise dozens of local, national and international education conferences and events. He holds a BA in intercultural communication from the University of Arizona, an MA in international education from The George Washington University, and is currently pursuing a PhD in international education at Osaka University, Japan. His research explores the conception and implementation of internationalisation at national universities in Asia.

Lisa Lam

Dr Lisa Lam is currently the Assistant Director of General Education (GE) at the Hong Kong Baptist University (HKBU), Hong Kong SAR. She is responsible for managing the university-wide GE curriculum, assuring the quality of GE courses, and co-managing the University Core Curriculum with other academic units. The latest projects are to implement the new GE curriculum, and to work with faculty members to develop at least 120 new interdisciplinary GE courses and credit-bearing service-learning/ experiential learning GE courses. The new development is in line with the university's efforts to provide the best student experience and enhanced community impact in student learning. Dr Lam holds a BA in English, an MPhil in Intercultural Studies and a PhD in Cultural Studies from the Chinese University of Hong Kong.

Leong Wei Shin

Dr Leong Wei Shin is Assistant Dean of Degree Programme and Student Life at the National Institute of Education, Nanyang Technological University (NIE-NTU), Singapore. Prior to joining NIE-NTU, Wei Shin was serving as Head of Aesthetics Department with a secondary school and a Unit Coordinator at Curriculum Planning and Development Division, Ministry of Education (MOE). Wei Shin currently teaches undergraduate, graduate and executive leadership and professional development courses on curriculum planning and implementation, assessment literacy, formative assessment and reflective practices. He is also involved in leading several research projects on Assessment for Learning and student self-regulation in MOE and schools (e.g. http://www.nie.edu.sg/project/oer-12-15-ccd). As the focal contact person for NIE of the Network on Education Quality Monitoring in Asia Pacific, he has regularly been invited by UNESCO to be their assessment specialist-representative and guest speaker on formative assessment and alignment of curriculum, assessment and teaching.

Tsediso Michael Makoelle

Tsediso Michael Makoelle is currently the Vice Dean for Research and an associate professor at Nazarbayev University in Nur-sultan (Astana), Kazakhstan. He is one of the recipients of the prestigious Nelson Mandela scholarship to the UK. He holds the degrees of Doctor of Philosophy (PhD) in Inclusive Education from the University of Manchester (UK) and a Doctor of Education (DEd) in Education Management and Leadership from the University of South Africa (UNISA). His span of experience in education stretches for more than 25 years in various teaching and leadership capacities at universities and schools in South Africa and abroad. He has written and published extensively on inclusive education and education leadership for both a national and international readership. He has supervised to completion several Master and PhD students and members of several international research bodies. He is a reviewer of grants applications for the South African National Research Foundation (NRF), has reviewed papers for several international journals, and evaluated research doctoral and master theses for several universities in South Africa and elsewhere. He has also reviewed post graduate courses and programmes for many universities and serves on the editorial boards of several international journals. He is passionate about inclusive education with research interests in conceptualisation and operationalisation of inclusive pedagogy within the disadvantaged South African classroom contexts and beyond. He has devoted his research work to the framework of Participatory Action Research, informed by notions of critical, reflective practitioners and transformative epistemologies.

Reiko Yamada

Reiko Yamada PhD is a professor at the Faculty of Social Studies and Director of the Center for Higher Education and Student Research at Kyoto's Doshisha University, Japan, where she was also the former dean of the Faculty of Social Studies. She received her MA and PhD from the University of California, Los Angeles, School of Education, in Social Sciences and Comparative Education. She has long been interested in comparative higher education policy in OECD countries. More recently, she has conducted a quantitative study for student development and is engaged in comparative student research between Japan, Korea and the United States. She served as the Director of the Center for Learning Support and Faculty of Development and Assistant Academic provost at Doshisha University. She also served on the committee of the Central Education Council in Japan. She was the first president of the Japanese Association of the First-Year Experience. She is the author of *For the Quality Assurance of Undergraduate Education* (Toshindo, 2012). She is also editor of *Quality of Higher Education and its Evaluation: Japan and the World*, (Toshindo, 2016).

Friday
November 01
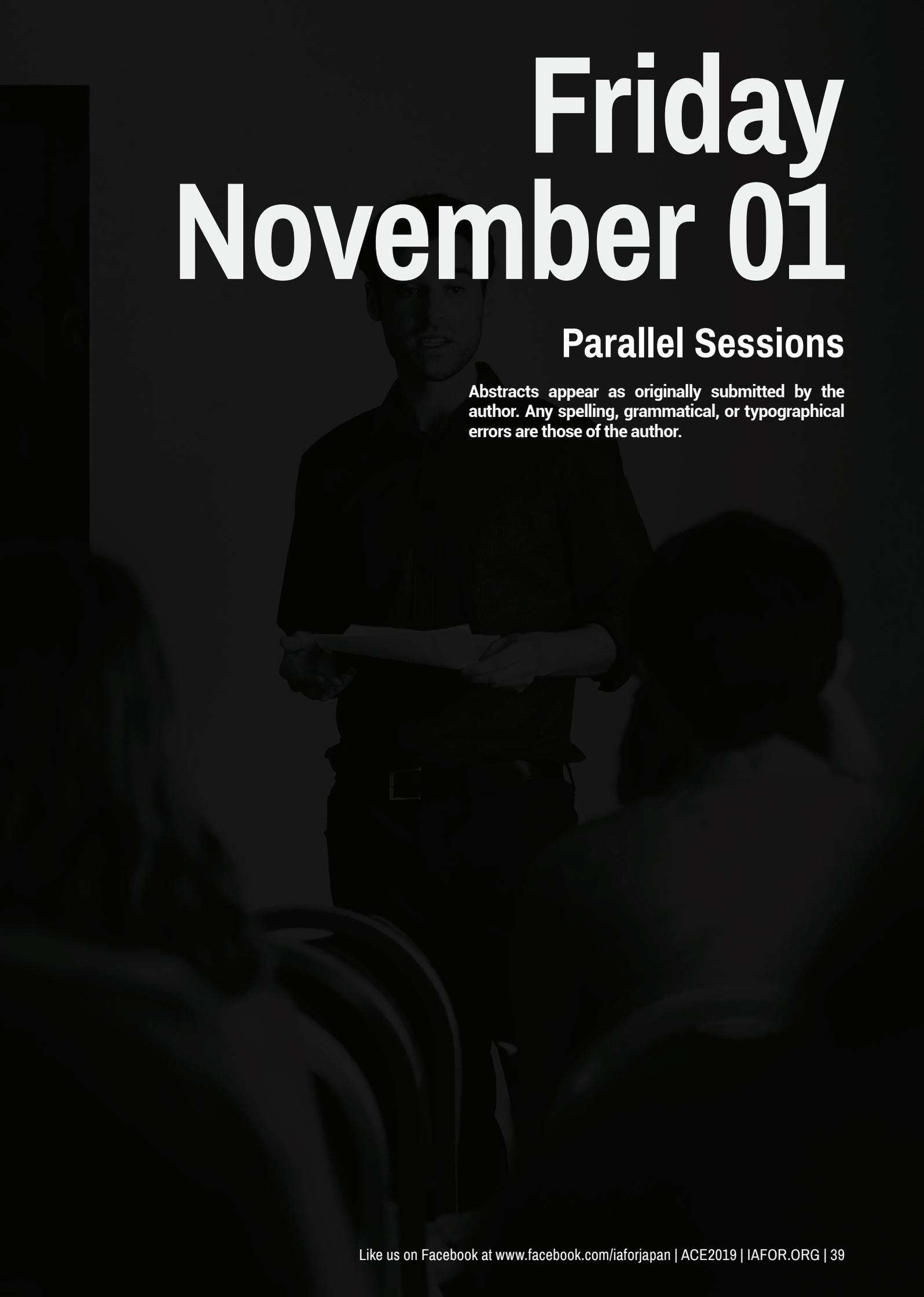
Parallel Sessions

Friday Session I
Panel Presentation

Session Chair: Tzu-Bin Lin

53970   13:10-14:50 | Orion (5F)
Community of Practice in Different Contexts: Experience from Taiwan and Singapore
Tzu-Bin Lin, National Taiwan Normal University, Taiwan
Victor D. T. Chen, National Institute of Education, Singapore
Chiao-Wen Wu, National Taiwan Normal University, Taiwan
Li-Yi Wang, National Taiwan Normal University, Taiwan

It is increasingly acknowledged by researchers across the world that community of practice (CoP) is a good means of school improvement as well as a practical way of doing professional development for teaching professionals. There is no exception in East Asia. Both Singapore and Taiwan promote this concept and practice in its education systems. In this panel, researchers from these two places are going to share their experiences of CoP. Three case studies will be presented by various panel participants. Each case is an outcome of a research project and therefore, the findings are supported with empirical data. These cases cover different levels of education from secondary to tertiary education. CoP is often considered to be capable of empowering teachers and cause bottom-up changes in school contexts. After the three cases, we draw on the theories related to teacher efficacy to show how CoP can enhance teacher efficacy in the East Asian context. our aim is to share research findings while triggering more conversations on CoP in East Asia.

Friday Session I

Panel Presentation

Session Chair: Clarence Ng

53673   13:10-14:50 | 604 (6F)

Promoting Higher-Order Literacy Learning Among Disadvantaged Students in Australia and Hong Kong

Clarence Ng, Australian Catholic University, Australia
Peter Renshaw, University of Queensland, Australia
Alan Cheung, Chinese University of Hong Kong, Hong Kong
Barley Mak, Chinese University of Hong Kong, Hong Kong

Disadvantaged students from low SES families are increasingly at risk of falling behind in the learning of higher-order skills (HOS) such as analysing and making inference. This is a significant issue because HOS are critical for creative and analytical literacy engagement and production using print-based and digital materials in and out of school. Delaying or failing to address this educational challenge will create an underclass, sub-skilled graduates from disadvantaged backgrounds who find it difficult to participate productively in literacy-rich advanced economies. The proposed symposium describes an ongoing comparative project that seeks to understand why, how and under what circumstances, economically disadvantage students are supported or unsupported to learn HOS in Australia and Hong Kong. The symposium will begin with a presentation that explains the rationale and design of this comparative project. Following this overview, the Hong Kong and Australian teams will discuss the current policy frameworks governing the delivery of literacy education in Hong Kong and the Australian State of Tasmania. Based on the results of a policy scan, the challenge of offering advanced literacy education to disadvantaged students in both countries will be explained. In addition, constraining and facilitating factors for offering HOS to disadvantaged students will be discussed using the results derived from an interview study with a selected group of educational leaders and school principals. The symposium will be concluded with an open discussion regarding feasible ways to overcome key constraining factors that hinder disadvantaged students' equitable access to advanced literacy education in Hong Kong and Australia.

13:10-14:50 | Room 605 (6F)
Friday Session I
Assessment
Session Chair: Roszalina Binte Rawi

53078   13:10-13:35 | 605 (6F)
Synergy and Collaboration in Developing a K-12 Compliant Tertiary Admission Examination
Crisanta De Leon, Bulacan State University, Philippines

This study, Development and Validation of a 21st Century Education-Based University Admission Examination investigated the validity and reliability of the proposed test for the four strands in the K-12 Senior High Curriculum: ABM, GAS, HUMMS, and STEM. The CIPO model was used as the paradigm that guided the conduct of the study. Each test for the four strands consisted of 200 items. A panel composed of nine (9) experts in the different fields validated the contents of the tests. The content validation revealed that the tests were considered "very good". Content validation was based on ten indicators: Content, Test Format, Readability, Mechanics, Clarity, Language Register, Structure, Organization, Authenticity, and Presentation. The test items for each of the four strands were pilot tested to selected 100 senior high school students enrolled at four pilot schools, School Year 2017-2018 in the National Capital Region (NCR). Results of the test were submitted to item analysis using KR-20 to determine the index of difficulty which is a measure of the proportion of examinees who responded to item/s correctly and discrimination index, which is a measure of how well the item discriminates between examinees who are knowledgeable in the content area and those who are not. Item analysis was an important phase in the development and validation of the tests for the four strands. It was used to identify the test items that were not working well.

54510   13:35-14:00 | 605 (6F)
A Language Proficiency Test that Works
Peter Shih, Hangzhou Panda Education and Technology Ltd. Co., China
Qiwen Zhou, Hangzhou Panda Education and Technology Ltd. Co., China

Either out of inadequate technology or for the sake of convenience, most language proficiency tests tend to oversimplify students' diverse needs and provide one size fit all solutions. Take Oxford Young Learners Placement Test for example. One part of this test combines grammar, vocabulary and functional language use. A student gets a final score and a corresponding CEFR level at the end of the test. However, such generic result cannot provide individualized solution for learners. Based on a sample of 156,221 young English learners aged 4 to 12, we find young ELLs have various language acquisition paths both in language knowledge (vocabulary and grammar) and skills (listening, speaking, reading and writing). For instance, learners' grammar knowledge is not always in sync with their lexical range. For any individual, each aspect of the test results may fall into different categorizes, sometimes with huge gap. This indicates the report provided by many test developers might be either too general or unreliable because learners' vocabulary and grammar levels are usually underrepresented or assumed identical to their four language skills. The clear insight into all aspects of language development can help us design a language proficiency test that provides tailored solutions for each individual in developing different domains of competence. With the big data analysis and computer-assisted technology, we also find some benchmarks that can predict what a learner know and doesn't know so as to shorten test time by 5.4 times.

54507   14:00-14:25 | 605 (6F)
Diagnostic Distractor Design in Computer-assisted Multiple-choice Grammar Tests: A Case of Young Chinese ELLs
Monica Huang, PandaABC Educational Technology Co., Ltd., China

This presentation proposes a diagnostic design of distractors in computer-assisted multiple-choice grammar tests for young Chinese ELLs. Grammar assessment is common for second language learners in many places like in China, but its diagnostic value has received little attention so far. Major large-scale English proficiency tests either assess grammar indirectly (e.g. TOFEL primary) or have direct grammatical diagnoses whose difficulty level mismatches young learners' abilities (e.g. DIALANG test). With a growing interest in Assessment for Learning, comprehensive and detailed grammar diagnoses will have great implications for more autonomous and personalized learning. Therefore, the presenter will evaluate the pros and cons of the most common task type in assessing grammar, multiple-choice questions in sentential contexts. The speakers will attempt to identify aspects of grammar that are diagnostically relevant and hypothesize that distractors focusing on form dimension of grammar are more plausible than those focusing on meaning in low context testing. This conceptual discussion will be followed by an empirical analysis of a pilot test administrated to a sample of 82 children aged from 4 to 12 years old. The test aims at giving specific feedback regarding 90 grammar points based on China's Standards of English and contains 49 items with 146 distractors. Preliminary results of comparative distractor analysis support the hypotheses. Additionally, with computer-assisted automatic scoring, the use of semi-correct distractors to diagnose different types of grammar errors within one task will be explained.

54378   14:25-14:50 | 605 (6F)
Encouraging Independence and Interdependence in Assessment: Moving Towards Assessment for Learning in Heritage Language Classrooms in Singapore
Roszalina Binte Rawi, Nanyang Technological University, Singapore

Assessment for learning (AfL) can be viewed as a set of practices that enhance student learning. AfL is applicable in many varied contexts, yet the necessary situation-specific enactment (reflecting, for example, the learner's age, subject matter and resources available) can impede critical examination and thoughtful dissemination. This study explored the extent by which teachers in Malay heritage language classrooms understood, believed and practiced AfL. The three principles underpinning AfL were originally formulated by a large multi-university team working with over 40 schools in England, and can be summarised as: making learning explicit, promoting learner autonomy, and focusing on learning rather than grades. The research reported in this paper involved Malay Language teachers from multiple secondary schools across Singapore. The study involved a survey completed by 121 teachers to indicate the extent of their belief and practice of AfL, 8 classroom observations and 20 in-depth interviews with teachers who have different AfL profiles. It was found that while Malay Language teachers were keen to develop their AfL understanding, they did not associate changes that they had to implement in their classroom assessment practices with the principles underpinning AfL. Also, teachers' attempts to carry out independent self-assessment and interdependent peer assessment were successful only to a certain extent due to the reluctance of students to switch their focus on learning, rather than task performance. It is suggested that the application of AfL principles can make assessment reform in heritage language classrooms more coherent and practices meaningful for teachers.

13:10-14:25 | Room 607 (6F)
Friday Session I
Mathematics Education - Cognitive Skills
Session Chair: Matthew Lasap

53676   13:10-13:35 | Room 607 (6F)
Students' Problem-Solving and Critical Thinking Skills: Bases for the Development of Contextualized Learning Module in Geometry
Efren Tellermo, Guimaras State College, Philippines
Chive G. Gabasa, West Visayas State University, Philippines

This design research aimed at developing a contextualized learning module on the basis of the level of problem-solving and critical thinking skills of the Grade 7 students particularly in Geometry under the K to 12 Curriculum.. This study utilized the researcher-made problem-solving and critical thinking skills test. The results revealed that the students' problem-solving and critical thinking skills were at the beginning stage. The least-learned competencies in problem-solving and critical thinking skills were the bases of developing a contextualized learning module utilizing the ADDIE model. The design and development of the module was done through a seminar-workshop participated in by secondary school mathematics teachers. The implementation of the final draft of the module was done through pilot testing to determine the quality of the module. The results revealed that majority of the students found that the module was easy, exciting, enjoyable, and can enhance their problem-solving ability and critical thinking skills. The teachers also found that the contextualized activities can arouse the interest of the students. Hence, the contextualized learning module developed by the researcher can be used by teachers as support instructional material. Competencies in mathematics will be learned by more students if the contents are taught in the students' real-world context.

53168   13:35-14:00 | Room 607 (6F)
Analysing the Inextricable Link Between Visualisation and Reasoning When Solving Mathematical Problems
Beata Dongwi, Rhodes University, South Africa
Marc Schäfer, Rhodes University, South Africa

While the use of visualisation is an essential problem-solving strategy in mathematics, it is somewhat neglected in actual mathematics classroom practices especially in high school. This paper reports on the findings of a case study research that was conducted in Namibia to explore the significance of using visualisation by selected Grade 11 learners when they solved geometry word problems, and how it related to their mathematical reasoning. The research used the learners' responses to word problems during task-based interviews. Data included interview transcripts, audio and video recordings and learners' worked-out solutions to the given word problems. Using enactivism to theorise the relationship between visualisation and reasoning, the study demonstrated that there exists an inextricable connection between these two embodied processes when engaging in word problem solving. Further, findings suggest that if visualisation processes are incorporated in task development, and if learners are encouraged to talk about their solutions and problem-solving strategies, then a cyclical navigation between their use of visualisation and mathematical reasoning processes is inevitable. This inextricable relationship is termed co-emergence in the context of an enactivist perspective. Therefore, we argue in this paper for the (re-) consideration of visualisation as a word problem-solving strategy for its claimed implication in the development and nurturing of mathematical reasoning.

52999   14:00-14:25 | Room 607 (6F)
Design and Technology – Performance Task Based Instruction Towards the Development of Cognitive Skills for Understanding in Mathematics
Matthew Lasap, Ateneo de Iloilo, Philippines
Elvira Arellano, West Visayas State University, Philippines

The researcher saw potential in the Performance Task (PT), Design and Technology (DT) and Problem-Based Learning (PBL) as best practices in the field of education. This study combines the strengths of these three teaching-learning strategies into one in order to optimize the development of students' cognitive skills towards the understanding of Math. To achieve this end, an Embedded Mixed Method design, with the main design the Grounded Theory by Strauss and Corbin and the embedded design the Explanatory Sequential Mixed Method, was used. The qualitative data analysis showed that some cognitive skills are involved in perceiving and relating to the real world—themed as Domain Sensing which includes Spatial Perception and Language Skills. A set of cognitive skills, on the other hand, are responsible in the active "gateway" or Control of the information. These are the Working Memory and Attention. After the information had been "admitted", the Speed of Information Processing, Cognitive Flexibility and Field Dependency determine how the information is processed. All these sets of cognitive skills support the Higher Cognitive Functions. It was also found out that in doing a DT-PT BI, the Richness of the Task and of the Problem served as "initiators" of effective use of the cognitive skills in a DT-PT BI. The Working Atmosphere on the other hand serves as the context for the cognitive skills. Finally, students' Strengths and Handicaps, Values and Outlook, and Ascribed Culture of Math were found to be intervening conditions in the effective use of the cognitive skills.

13:10-14:50 | Room 608 (6F)
Friday Session I
School Principals
Session Chair: Maria Gil-Izquierdo

52824   13:10-13:35 | Room 608 (6F)
From Teaching to Leading: A Phenomenological Inquiry on Overcoming Challenges From the Lens of Novice Principals
Joy Magalona, Philippine Normal University, Philippines
Adonis David, Philippine Normal University, Philippines

Literature suggest that high school principal position is one of the most essential, complex and challenging assignments in the public education system. While efforts to understand the nature and dynamics of the transition from being a teacher to a principal have been undertaken in different studies worldwide, a dearth in literature exists in the context of Philippine education. For an accomplished teacher, advancing in to an administrative position is a significant avenue for professional growth and an important career achievement as well. It is undeniable that the best candidates for school administrators have previously held positions as successful teachers. Seemingly, no research has ventured yet to explore experiences of Filipino novice principals on overcoming challenges along their own transition from teaching to leading thus, this study was conducted with five novice principals (n=5) as participants. From the thickness and richness of the descriptions of the field text gathered in this study, an interesting conceptualization labeled as the Leader Continuum Movement which consists of (a) motivation for the move (b) the big move (c) steadfast emerged. Impliedly, the emerged model Leader Continuum Movement a orded an eidetic description of the dynamics of the prevailing transition from classroom teaching to leading a school. The novice principal milieu circumscribes facets associated with preparations and influences (motivation to move), transition challenges (the big move) and meeting halfway (steadfast). Findings of this research will be valuable to current principals, teachers transitioning to a leadership role, and those aspiring for a leadership position.

53312   13:35-14:00 | Room 608 (6F)
The Development of Professional Learning Communities (PLCs) in the Philippines: Roles and Views of Secondary School Principals
Wenefe Capili-Balbalin, University of Waikato, New Zealand

It is widely recognised that principals play an indispensable role in the professional development of teachers in schools. In the Philippines, principals encourage teachers to participate in the traditional and most common approach to professional development such as conferences, seminars, workshops, and training. Despite documented benefits of these traditional approaches to teacher professional development, recent studies show that many teachers find them insufficient, inconsistent, and sometimes they do not necessarily address teachers' classroom needs. There is a growing body of literature that recognises the importance of teacher engagement through professional learning communities (PLCs) as a new approach to teacher professional development. The study explored the roles and perspectives of secondary school principals in the development of PLCs in the Philippines. It is an underlying assumption that principals' understanding of their roles in the implementation of teacher professional development policies in schools is central to the formation of PLCs. This raised two important questions that principals needed to contemplate: How did they view and implement national policies on teacher professional development at the school level? And, how did they perceive and establish PLCs in their schools? The study utilised a qualitative research methodology based on an interpretive paradigm. Through the use of semi-structured interviews alongside policy analysis, three main themes emerged: lack of continuing teacher professional development programmes in the Philippines; varying views of principals in the development of PLCs in schools; and, effective leadership styles as key to support continuing professional development of teachers.

52397   14:00-14:25 | Room 608 (6F)
Experiences of Outstanding Principals as Mentors: Policy Inputs to a Viable Mentoring Program in DepEd – Division of Pasig City
Isabelle Sibayan, Department of Education, Philippines
Maricris Murillo, Pasig City Science High School, Philippines

This paper aims to understand the everyday experiences of outstanding principals as mentors cum school leaders, analyze their challenges and secrets to successful school leadership and management, and propose policies for a viable mentoring program in DepEd – Division of Pasig City. In the context of this study, mentoring is a learning and development (L & D) program deliberately designed to prepare aspiring principals for the position to ensure that the next generation of school heads are well-prepared for the demands of the job. Documenting the success stories of mentoring programs implemented by school principals presents an opportunity to encourage other school leaders to do the same in their own respective schools, and may help strengthen and institutionalize a culture of mentoring and continuous improvement in the Division of Pasig City. Utilizing a case study design, this paper purposively identified five (5) outstanding principals who answered the following questions through semi-structured interviews and focus group discussions: (1) How were the participants mentored prior to them becoming school administrators themselves? (2) What mentoring programs have the participants put in place prior to and after they became school administrators? (3) How did the participants deal with the challenges of sustaining the mentoring programs that they initiated? (4) What have been the products of the mentoring programs started and sustained by the participants? (5) What types of mentoring programs may be institutionalized in the Division of Pasig City?, and (6) What policies may be put in place to institutionalize mentoring in DepEd Pasig?

53332   14:25-14:50 | Room 608 (6F)
The Role of School Leaders' Styles in Students' Academic Performance
Maria Gil-Izquierdo, University Autonoma of Madrid, Spain
Alvaro Choi, University of Barcelona, Spain
Javier Valbuena, University of Zaragoza, Spain

Increasing the efficiency of the resources allocated to the education system and improving the academic results of the students constitute a priority for educational authorities. Recent evidence seems to indicate that the leaders of the schools can play a relevant role in achieving both objectives. The link between leadership and academic performance is difficult to determine for at least three reasons. First, because of the difficulty of establishing a single definition of school leadership. Second, due to the existence of different types of leadership. Finally, because it is complex to isolate both the direct and indirect effects - through other agents, such as teachers - that the leader of a school can exercise over the students. It implies a dispersion in the literature evidence so as a scarcity of studies that estimate the impact of various dimensions of leadership on the performance of students. In this paper, we review the existing literature restricted to impact evaluations on academic results and implement a model using longitudinal data using the PISA database. The results of previous studies allow us to conclude that: a) leadership activity affects academic performance; b) the size of this effect is undetermined and seems to vary depending on the environment; c) controversy persists regarding which types of leadership are most effective in improving academic performance; and d) the stability of the management teams and the inspection of their activity have a positive effect on academic performance. Our results indicate that curricular and professional development leadership enhances academic performance.

13:35-14:50 | Room 704 (7F)
Friday Session I
Technology in Education
Session Chair: Zenaida Candia

53870   13:35-14:00 | Room 704 (7F)
Technology-enabled Active Learning (TEAL): Insights From a Hybrid Reality Approach
Augustus Raymond Segar, Swinburne University of Technology, Malaysia
Ida Fatimawati Adi Badiozaman, Swinburne University of Technology Sarawak, Malaysia

Globalization and rapid advancement in technology are continuously changing the educational landscape. Such rapid transformation necessitates the implementation of innovative strategies in the educational system which can aid students in attaining 21st century skills. In this study, we explored the impact of utilizing Technology-Enabled Active Learning (TEAL) through hybrid reality to investigate students' experience and understanding of two cultural heritage sites in Sarawak, Malaysia. Hybrid reality refers to the combination of Augmented Reality (AR) and Virtual Reality (VR) within a single application. For this mixed methods study, we first developed a questionnaire designed to assess the effect of visualizations, particularly through the time-lapse (i.e. past to present) and witnessing the historical changes in a new dynamic and interactive experience through the Kuching Heritage Application. Approximately 80 students responded to the survey and eight students consented to be interviewed in the subsequent phase of the study. Quantitative findings revealed improved conceptual understanding of the subject matter. Furthermore, a majority of the students noted the benefits of interactivity, visualization, and hands-on experiments, which the technology helped enable. The findings from the qualitative phase further expanded on this and revealed that TEAL has supported meaningful learning as hands-on, integrative, and collaborative active learning experiences led to students' empowerment in navigating their learning. Overall, this study thus contributes to technology-enabled learning literature by highlighting the differences between user groups with different needs. In doing so, opportunities to curate tailored and engaging content for cultural heritage appreciation and experience can be further enhanced.

54042   14:00-14:25 | Room 704 (7F)
The Influence of Vodcasting to the Comprehension Skill of the Selected Grade 8 Students
Maulida Watamama Manaol, Mindanao State University-Integrated Laboratory School, Philippines

Vodcasting is a process of teaching which is subscribed from a podcast creator online. It is a mix of video and audio files with visible innovations that can be utilized to upgrade the intellectual capabilities of students. This research used quasi-experimental design to find out the influences of vodcasting to the comprehension skill of the selected grade 8 students of MSU-Integrated Laboratory School. Two methods of teaching were executed—traditional for the control group and vodcasting for the experimental group. This study further utilized quantitative and qualitative research approaches in describing the participants' comprehension and the participants' performances in the teaching sessions. The researcher employed vodcast videos on the simple tenses, grammar tests, and mini-FGD for triangulation. In analyzing and interpreting the data gathered, mean, standard deviation, t-test, t-test independent samples and Levene's test were used. Analyzed data revealed that the mean gain score of the experimental group are far higher than that of the gains of the control group. Thus, vodcasting way of teaching is effective and encouraging but will not substitute the role of the teacher for it only serves as aid for them to teach the lesson.

54602   14:25-14:50 | Room 704 (7F)
The Use of Mobile Assisted Language Learning in Enhancing Language Skills Among the Grade 8 Students of Ibn Siena Integrated School Foundation
Zenaida Candia, Mindanao State University, Philippines

This study was conducted to inquire on the use of Mobile Assisted Language Learning on enhancing language skills. It attempted to find out the following: (1) What is the performance of the students in the experimental and control group in the pre-test and post-test? (2) Is there a significant difference between the means scores of students in the control and experimental groups in their pre-test before the intervention? (3) Is there a significant difference between the means scores of students in the control and experimental groups in their post-test after the intervention? (4) Is there a significant difference between the mean gain scores of students in the control and experimental groups after the intervention? The study is a quasi-experimental design. This study involves MALL as the primary tool for this research as a strategy in the learning-teaching process to assist its effectiveness. The respondents are divided into groups – the control and experimental. A pre-test was given first prior to the intervention. Lecture Method was used for the control group whereas the experimental group made use of MALL. After 4 weeks of intervention, the post-test was administered. The study findings had manifested that all the hypothesis testing were not significant which means there were no significant differences in the use of MALL as an intervention although it motivates and encourages active participation of learners in the teaching-learning.

14:00-14:50 | Room 705 (7F)
Friday Session I
Workshop Presentation

53246   14:00-14:50 | Room 705 (7F)
Use of QR Code System in Enhancing Teaching and Learning
Christine May Torres - Reyman, Columban College, Inc., Philippines
Jeanelle Avila, Columban College, Inc. (Barretto), Philippines
Laurabel Bacones, Columban College, Inc (Barretto), Philippines

QR Code System or Quick Response System is a two dimensional bar code system initially designed for automotive industry in Japan is now one of the most popular Universal Product Coding system used because of many applications such as product tracking, item identification, managing documents and marketing features efficiency. Today's educational system is challenged to deliver a more dynamic approach particularly with the challenge of the K to 12 Curriculum implementation that ICT integration is a necessity. It is a challenge to transform every classroom into a 21st Century set up by providing technology in the instruction and assessment. In this workshop, the proponents will demonstrate how QR Code System can be used in teaching and learning process. Initially, this concept was used in plant identification and Science trail or Science Hunt Activities. The students who were able to experience gave positive feedback. However, there are still rooms for improving the of this system such as in terms of the QR Code size, databases and QR Code generators.

14:00-14:50 | Room 707 (7F)
Friday Session I
Community Education
Session Chair: Mohd Ramadan Ab Hamid

54392   14:00-14:25 | Room 707 (7F)
Site Co-Lab as a Community Engagement Project: A Case Study of the St. Joseph Chapel Renovation
Joseph Sedfrey Santiago, Ateneo de Manila University, Philippines
Jason Dy, Ateneo de Manila University, Philippines

Site Co-Lab, an academe-based arts and design project, was co-founded by the co-authors of this paper - Fr. Jason Dy, S.J. as curator and J. Sedfrey Santiago as project manager. The project partners with communities to help the latter respond to their needs that are related to arts and design. It is also serves a laboratory where findings and results are documented for research and publication as a means of sharing lessons learned from the partnership. Site Co-Lab's first partner is Freedom Park community in Batasan Pambansa, Quezon City, with the renovation of the community's St. Joseph Chapel as its first activity as it is the articulated need of the community. In this paper, the authors describe the beginnings of the partnership, specifically how it started, the specific activities the partners have undergone to achieve the agreed goal, and the stages or phases that the community engagement has undergone so far as pointed out by Sargent and Water; i.e., 1) initiation, 2) clarification, and 3) implementation; and at this time we also project the happening of the fourth stage – completion. Our learnings will serve as in good stead for our expected next project – assisting a private high school in the development of its art appreciation curriculum.

53391   14:25-14:50 | Room 707 (7F)
Study Protocol of Design and Development of Web Approach to Control Hypertension (WAtCH) for Adult Hypertensive Patients in Malaysia
Mohd Ramadan Ab Hamid, Universiti Teknologi MARA, Malaysia
Norazmir Md Nor, Universiti Teknologi MARA, Malaysia
Siti Sabariah Buhari, Universiti Teknologi MARA, Malaysia
Harrinni Md Noor, Universiti Teknologi MARA, Malaysia

Nutrition education is essential for adult patients with hypertension to reduce the adverse outcomes of the disease through modification of the dietary intake. Web Approach to Control Hypertension (WAtCH) has the potential for improving the quality of nutrition education. This paper describes the protocol to design and develop the website. WAtCH is aimed to improve nutrition knowledge and promote behavioural changes among patients. This study involves three phases, which phase I: inputs: collecting assessment data, phase II: outputs: designing the theory-based intervention and phase III: evaluation plan. Mix-method approach (qualitative and quantitative) will be applied. Theory of Planned Behaviours, Self-Determination theory and Cognitive Load Theory will be used in the development of the website. WAtCH will be piloted to the targeted population at the end stage of the development. The website will (1) serve as a portable resource for patients on nutritional education for blood pressure control; (2) supplement the hypertension clinical care by providing an online educational tool for patient. This paper describes the process of the design and development of the nutrition education website for patients with hypertension.

15:05-15:55 | Room 604 (6F)
Friday Session II
Literacy
Session Chair: Sohaimi Abdul Aziz

54516   15:05-15:30 | Room 604 (6F)
The Trends of Competency-based Curriculum Development in Taiwan
Yu Hsiu Su, Department of Education National Pingtung University, Taiwan
Hui Lan Wang, Department of Education National Pingtung University, Taiwan

The aim of this study was to investigate the curriculum policy innovation, particularly the trends of competency-based curriculum development which had been highlighted in "The Master Framework for the 12-year Basic Education Curriculum Guidelines" as new important direction of education reform in Taiwan. Through theoretical perspectives and scholarly research by means of literature review, the basic assumptions of curriculum innovation, the core concepts and main policy of competency-based curriculum had been analyzed and led to the explanation, generality and understanding. The results revealed that the subjectivity of the learner, the growth mindset, interdisciplinary learning design and self-edited teaching materials or textbooks are the focus of competency-based curriculum development. The adjustment of teachers' roles and empowerment, positive supports from the government, different administrative levels, parents and also society will be the key factors for the development of curriculum innovation in Taiwan.

54128   15:30-15:55 | Room 604 (6F)
The Significance of Media in Literary Theory: Shaping the Future of Literary Criticism of Electronic Literature
Sohaimi Abdul Aziz, Universiti Sains Malaysia, Malaysia
Mohammad Fitry Ariff Ahmad Zulkefley, Universiti Sains Malaysia, Malaysia

Media plays an important role in literary studies. Nevertheless, the media has been neglected since the emergence of literary theories and criticism. Today, the development of digital media, which has influenced the world, has greatly influenced the development of literature. This development has created a research gap for further research on the effect of media on literature. The emergence of electronic literature has become the fundamental drive to look into the importance of the media in literary studies specifically the need of literary theory and criticism that adopt the role of media. The aim of this paper is to show how important literary theory and criticism to incorporate the elements of media that will give a better understanding of reading, writing, authorship and meaning of literature in the different context of media usage. In this paper, a theory of literary digital media, which focuses on three aspects, the creation, presentation and reception of literary work are discussed, but only the aspect of the representation will be explored in detail and apply to the text studied. Using the video content analysis, a study has been done to analyse the audio, text and image that reflect a set of semantic meaningful representations of a video poetry entitled "Aku". This video poetry by Barlycine from Indonesia is an adaptation of a written poetry by Khairil Anwar, an Indonesian poet with the same title. This paper shows that theory of literary digital media, which become the basic aspect of the literary criticism of the video poetry is able to analyse semantic meaningful representations of the video poetry. This paper has also revealed the conventional of assumptions about reading, writing and meaning have challenged. A comparative study between the written text and the video poetry gives a better perspective of the effect of media on literature, specifically video poetry of electronic literature.

15:05-15:55 | Room 605 (6F)
Friday Session II
English as a Foreign Language
Session Chair: Harun Serpil

53375   15:05-15:30 | Room 605 (6F)
Intelligibility of Hong Kong English: Implications to Education
Ka Long Roy Chan, The Chinese University of Hong Kong, Hong Kong

Hong Kong English (HKE) has been researched excessively since the 1980s. These studies cover most parts of HKE, including phonetics, Phonology, Lexis, and Sociolinguistics etc. In recent years, various attempts have been done on the intelligibility of HKE and the results showed that HKE is basically very understandable to speakers all around the world. However, despite the increasing amount of studies in HKE, studies on how to immerse HKE into the local education system have rarely been conducted. One of the potential reasons for this would be the hesitance on the intelligibility of HKE. While there has been no attempts on immersing HKE into the local education, Hino (2018) created a framework to gradually immerse Japanese English into the local education system. Given Hong Kong is traditionally seen as ESL area while Japan is EFL, Hong Kong should also have a framework for such educational use due to its closer relationship to English. The current study is therefore conducted to serve two purposes: first, to investigate the intelligibility of HKE to people from different circles under the World Englishes paradigm; second, to see how the result can potentially fit HKE into the local education system using Hino's (2018) framework. A specifically designed online Verbal Guise program was developed and the preliminary results of fifty people show that HKE is highly intelligible with just slight difficulty in understanding the intonation of HKE. At last, A modified version of Hino's (2018) framework is made to suit the Hong Kong context.

53434   15:30-15:55 | Room 605 (6F)
Primary Causes that Hinder Learning Retention in Turkish 9th Grade EFL Classes and Successful Strategies to Address Them
Harun Serpil, Anadolu University, Turkey

This study focuses on the root causes behind Turkish EFL learners' inability to retain what they have learned, seeking ways to address these problems at the secondary school level. This study adopts a mixed method approach, involving three 9th grade classrooms with a total of 58 students and three teachers. The study was conducted in 2018 at a secondary school in a small town in southeastern Turkey, over one semester. In the first phase of the study, a 10-item survey was distributed to the students to be filled out, and it was completed by all 58 students. In the second phase, five students from each classroom (n=15) were interviewed. Next, their teachers were interviewed through a semi-structured interview, probing into the possible causes of low learning retention. The teachers participating in the study were also asked about any possible strategies they might be using to increase retention of subject knowledge taught in the class. The analysis of the obtained data indicates that the biggest cause for low learning retention for students is "not having a private room to study." This is followed by "family-related reasons" and "difficulties in concentration." Low socioeconomic status requiring students to help their families, leading to distraction emerges as a strong inhibitor of sustaining attention and retaining previous learning. Based on the qualitative interview data elicited from the teachers, close cooperation with parents is highlighted as the major strategy to tackle the problem. Some other practical strategies are discussed, and suggestions for further research are made.

15:05-15:55 | Room 607 (6F)
Friday Session II
Learning Management System
Session Chair: Jansamorn Pholboon

53276   15:05-15:30 | Room 607 (6F)
The Development of Terminology Learning System for Thai Classical Dance Through Learning Management System
Jansamorn Pholboon, Songkhla Rajabhat University, Thailand
Monton Pholboon, Prince of Songkla University, Thailand

Effective use of web application for self-paced learning can provide a valuable opportunity for students to make progress at a pace that is commensurate with their prior knowledge. To facilitate self-paced learning, the aim of this study was to develop the terminology learning system for Thai classical dance through Learning Management System. Based on the Randomized Solomon four-group design, the study was implemented on a group of performing art students using the purposive sampling method. The findings of the study revealed that, to develop the terminology learning system for Thai classical dance, the researchers used web application to enhance the quality of learning system. Acting as a powerful agent, it is most associated with 1) Webboard 2) Test instruments including Pre-test and Post-test 3) Lessons comprising. Two experimental and two control groups were involved in this study. The findings revealed that 1) after employing the learning system, the first experimental and control groups showed higher achievement results with a significance level of 0.01. As for a study period, the first experimental group completed their course within one week while the control one needed two consecutive months after completing the course. Moreover, according to the achievement scores, the second experimental group showed higher statistical results than the second control one in all aspects. With regard to quality assessment and satisfaction with learning and practice system for Thai classical dance, the findings indicated all at the highest levels.

52413   15:30-15:55 | Room 607 (6F)
Harnessing Learning Analytics to Improve Online Quiz Equity
Jess Wei Chin Tan, Singapore University of Social Sciences, Singapore
Chong Hui Tan, Singapore University of Social Sciences, Singapore
Hian Chye Koh, Singapore University of Social Sciences, Singapore

The use of online learning management systems (LMS) such as Blackboard, Canvas and Moodle is becoming a norm in higher education. In general, these systems provide tools to facilitate active learning such as discussion forums and student assessments such as online quizzes. Studies have shown that students who do pre-class online quizzes that encourage preparatory reading perform better in examinations. The Singapore University of Social Sciences (SUSS) is a university that caters primarily to working adults. In line with self-directed lifelong learning, it uses pre-class online quizzes to encourage students to self-study. SUSS uses Canvas as the learning management system to implement these quizzes. Students sit for 3 pre-class quizzes and need to obtain at least 12 out of 20 questions correct for the first pre-class quiz before class starts to be allowed to attend class. This motivates students to engage the course materials before the classes start. The faculty will usually prepare a bank of questions from which the questions for the pre-class quizzes will be randomly drawn for each student. The level of difficulty for the questions varies. This raises the issue of quiz equity despite the random allocation of quiz questions. In this context, this study investigates how the current method of question allocation has affected the equity of the quiz. It also proposes a solution to mitigate quiz inequity. With an integration of learning analytics and problem solving, we hope to provide a different approach to implementing online quizzes that will be more equitable.

15:05-15:55 | Room 608 (6F)
Friday Session II
Student Finance
Session Chair: Gauda Johannes Maseko

54151   15:05-15:30 | Room 608 (6F)
The Effect of Personal Finance Education on the Financial Knowledge, Attitudes and Behaviour of University Students in Indonesia
Irni Johan, IPB University, Indonesia
Karen Rowlingson, University of Birmingham, United Kingdom
Lindsey Appleyard, Coventry University, United Kingdom

Financialisation and the rapid advances in information technology throughout the world have created a more complex and dynamic financial sector. Younger generations today are in a particularly challenging situation. Starting to live independently, college students face new responsibilities to manage their finances, including budgeting, managing income and expenses, and paying bills. Developing sound financial capability during college years may lead to higher chances of attaining financial wellbeing in the future. This paper contributes to debates about the impact of personal finance education on financial capability that is financial knowledge, attitudes, and behaviour. Employed a face-to-face representative sample survey of 521 undergraduate students at IPB University (Bogor Agricultural University) in Indonesia, we measured the impact of a 14-week personal finance education course on students' financial capability. The findings show that the personal finance course have a positive and statistically significant impact on financial knowledge and behaviour. However, there was no statistically significant impact on financial attitudes after controlling for other factors. This paper also contributes to debates on personal financial education by arguing that experiences and family financial socialisation have a great impact on financial capability. Thus, when developing financial education, it is suggested that more practical content be included, as this can have a longer and more stable effect on developing attitudes and behaviour.

53207   15:30-15:55 | Room 608 (6F)
The Latent Peril of Student Debt: Analysing Students' Perception of Debt at Selected South African Universities of Technology
Gauda Johannes Maseko, Vaal University of Technology, South Africa
Merwe Oberholzer, North West University, South Africa
Susanna Levina Middelberg, North West University, South Africa

Although there is freed education for qualifying students, South African universities are still confronted with the student debt. The outstanding student accounts is mainly from students whose families earn income above the threshold or for whatever reason do not qualify for a government bursary. These students are vulnerable because they are not eligible for a government bursary, while they are not from affluent families that can afford the university fees. Consequently, universities face a challenge of unwarranted default rates and maintaining higher education accessibility. The purpose of the study was to determine students' perspectives on debt and how they are related to family income and some other selected demographic factors. In total 1382 students at five of the six universities of technology completed a questionnaire. Exploratory factor analysis was applied to group students' student debt perceptions into factors. Thereafter, an analysis of these factors means' was done to determine how the perceptions of debt relate to demographics and socio-economic variables. What was found is that having debt, students are mostly: (i) concern thereof; (ii) reflecting destruction reaction; and (iii) aware of the threats of debt. In the context of South African universities, this study also revealed some risk areas, i.e. undergraduates which are more concern about debt and the threat thereof than postgraduates; students attending university for longer periods (5-6 years) are more concerned than new comers; the previous "missing-middle" group that were excluded from free education during this investigation and all students with debt are concern thereof, relatively to those not having debt. This study's contribution towards the theory is that it confirmed that students with different socio-economic and demographic environments, and how they differently observe debt, i.e. the credit granted to them by their institutions.

Friday Session II

Symposium Presentation
Session Chair: Wei Shin Leong

53068   15:05-15:55 | Room 701 (7F)
Assessment for Learning in Singapore Context
Wei Shin Leong, National Institute of Education, Singapore
Tay Hui Yong, National Institute of Education, Singapore

In many Asian countries, educational agencies have heeded the advice of research findings and acknowledge the value of Assessment for Learning (AfL) practices through policy initiatives. At definitional level, the multiple evolving conceptions and theories of what constitutes AfL have consistently streamed in from overwhelmingly European and Anglophone-based research. The implementation of AfL in Asian classrooms may therefore encounter barriers such as deeply rooted learning traditions that conflict with current mainstream AfL methodology and an unfamiliarity with, or distrust of, specific AfL practices. This symposium presents findings from a grant-funded two-year mixed methods research study based in 13 Singaporean secondary schools. From the results, we present cases of how AfL are situated and enacted in Singaporean classrooms. How various stakeholders negotiate and select solutions to resolving tensions of assessment are analysed, as are mediating influences in this process. Overall, the findings suggest that, while AfL has gained traction among secondary-school teachers, they also reflect ambivalence in negotiating the formative and summative expectations of policy and practice.

Presenter 1 will present findings suggesting Singapore teachers reported valuing learner-centred AfL (e.g. self and peer assessment) more than they reported practising or feeling proficient in it. The qualitative data showed that teachers constantly toggle between AfL practices that focus narrowly on exams (more predominant) and those with deeper learning goals.

Presenter 2 will present findings on the role of middle leaders affecting teachers' perceptions of AfL; as well as how they themselves are influenced by and mediate policy implementation in schools. The study also found in response to various tensions encountered in their work, MLs used three dominant approaches in their assessment leadership – Technical, Tactical and Ethical.

Presenter 1 and 2 will then suggest implications for further inquiry and analysis. Singapore's continuous efforts to scale up a form of assessment that balances the summative and the formative are also reflected in other (Asian) contexts, where educational institutions continue to grapple between the priorities of external examination results and the need for assessment to improve learning. The findings from this study reflect teachers' efforts in negotiating the tensions between competing assessment priorities. Whether such efforts may yield positive results in Singapore or elsewhere could be explored further.

15:05-15:55 | Room 704 (7F)
Friday Session II
Workshop Presentation

54167   15:05-15:55 | Room 704 (7F)
What is Global Intelligence (GQ)? Beyond EQ, SQ, & CQ
Annette Karseras, Keio University & Temple University Japan

Global Intelligence (GQ) isn't rocket science. But it does draw on the insights of astronauts, such as Chris Hadfield. Hadfield was privileged to see our planet from beyond the bubble of Earth's atmosphere. From the ISS, ridges and vortices of naturally evolving geography (not socio-politics heightened by economic nationalism) map boundaries between land-, sea- and skyscapes beneath. The GQ perspective is co-creative. It's a work-in-progress derived from Bohmian and World Café style dialogues facilitated at Universities, conferences and corporate workshops, over 5 years. IAFOR's GQ workshop has 3 stages. Stage 1: Soundbites from past students' & clients' introduce you to GQ. GQ lies within the 4th iteration of 5 scales, from emotional, through social and cultural intelligences, to universal intelligence: EQ > SQ > CQ > GQ > UQ. Stage 2: Micro-learning activities develop your EQ & SQ communication skills, ready for Bohmian dialogue. Stage 3: Participants draw on their dialogue skills, at World Café tables, to have 'serious fun' and lighten the load of challenges related to the question "What is GQ?" Importantly, we start by 'framing the future' (and refrain from worrying about ways to wrestle with problems created by our individual and collectively warring pasts). For example, 'How can the next era of civilization develop so our grandchildren will like it? How can we integrate an interdependent global view (GQ) together with the sustainment of independent national interests (CQ)? These both-and, win-win approaches are at the heart of GQ premises that workshop participants can play with.

15:05-15:55 | Room 705 (7F)
Friday Session II
Workshop Presentation

54575   15:05-15:55 | Room 705 (7F)
Extensive Reading and Communal Reading: Two Approaches in Teaching Reading in EAP Programs
Ai Ishida, University of Toronto, Canada

For L2 learners in an EAP program at university, building an effective reading strategy is essential to survive a rigorous academic life. Anderson (1999) claims that both selections of appropriate level texts and the motivation to read are the two key elements to increase the reading rate. This workshop explores two approaches that are often used outside the classroom but can be useful if used in class for motivating and supporting EAP students: extensive reading and communal reading. While extensive reading, "pleasure reading," is often left as a volunteer activity outside the classroom, Takase and Otsuki (2012) warn that assigning students to read books outside class does not guarantee they become effective readers. I will demonstrate how I implement extensive reading as a class activity and emphasize that the key here is to give students lower level texts than their skills so that they can increase reading rates, build confidence and keep the incentive to read. Secondly, communal reading, aka "reading texts aloud and sharing with other people" is a technique often used with children or for reading religious texts. Gurdon (2019) claims that children whose parents read books aloud have a bigger vocabulary. Also, both Gurdon and Wright (2017) argue that communal reading helps readers challenge themselves to read higher-level texts. I use this approach when students are required to read newspapers, magazines, or academic articles. Through this workshop, I am hoping to have a discussion about how and when to alternate levels when teaching reading in EAP.

Friday Session II
Workshop Presentation

54567   15:05-15:55 | Room 707 (7F)
Open Letter to a Nation: Using the Open Letter Genre to Teach Intercultural Communication and Encourage Global Citizenship
Chad Eller, Providence University, Taiwan
Shiao-Wei Chu, National Chin-Yi University of Technology, Taiwan

This talk will explain a unit from a course on intercultural communication (IC) whose capstone assignment is to write an open letter to a nation or culture. The unit is designed to introduce concepts from IC, to ignite interest in foreign cultures, and to engage students' reflections about global citizenship. Students are encouraged to indulge their curiosity and to examine their feelings and preconceptions about a place, a culture, and its people. The open letter is a safe yet socially-engaging way for students to learn about culture while practicing a creative letter-writing genre. The open letter assignment is scaffolded through various activities, each designed to build students' awareness about IC concepts as well as the open letter genre. Activities include materials and discussions on basic concepts from the field of IC, readings from example open letters, group and individual fact-finding, and the eventual drafting of open letters. The audience will have access to example letters from students and be presented with ideas for adapting this activity to other contexts and purposes.

Notes
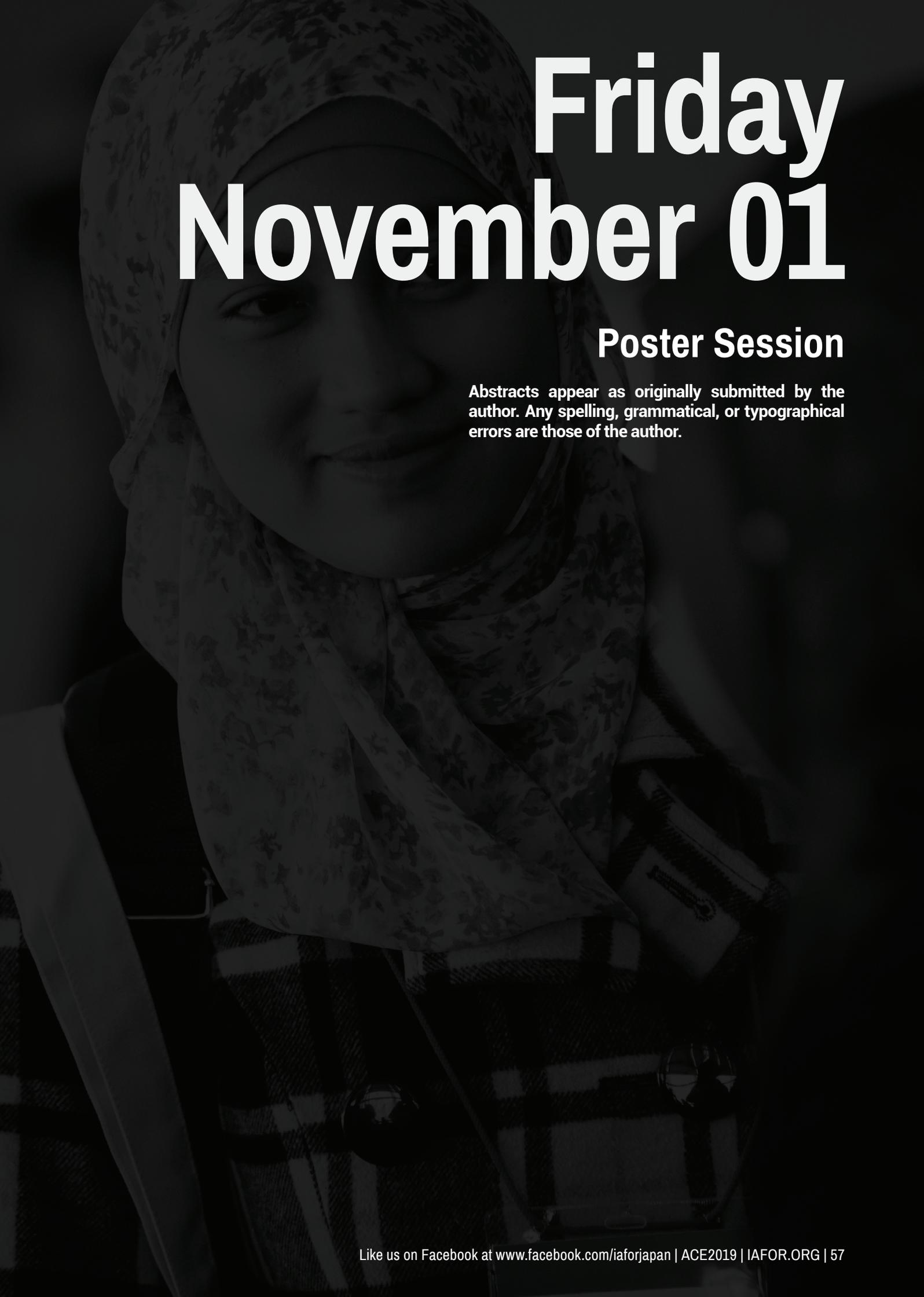
Friday
November 01

Poster Session

16:00-17:00 | Orion (5F)
Friday Poster Session

51746 | Friday Poster Session: 16:00-17:00
Interactive Facial Emotion Recognition Game for Children with Autism
Jim Gribble, UCSB, United States
Guoying Zhao, University of Oulu, Finland
Xiaohua Huang, University of Oulu, Finland

This paper reports on the design of facial emotion recognition software to improve the lives of children with autism by allowing them to practice creating and conveying emotions while simultaneously learning to recognize the same emotions in others. This paper reports on process of creating such a game. There are two levels involved in the game. First, children are asked to mimic facial expressions corresponding to happy as well as sad. Level two challenges them to focus their attention up from the mouth and to the eyes and forehead to convey a surprise. Research on children with autism has largely focused on asking them to recognize and identify facial emotions in others, which is important. To our knowledge, no research has focused on asking autistic children to create different facial emotions themselves (i.e. their own "sad" face) using a computer screen and camera with advanced facial recognition software as we do here.

52258 | Friday Poster Session: 16:00-17:00
How to Be Elective by Being Selective: Why Not Question and Debate: A Framework
Carmel Charles Sant, Anadolu University, Turkey

The ELT curriculum gap at Anadolu University pinpointed that no debating English course was available. Was left at liberty in 2016/2017 academic year to tailor a new elective speaking course for ELT undergraduates. Argumentation Theory with an emphasis on socio topics in the Syllabus Design of this particular course seemed to be the ideal filler. Flexibility was key as the topics chosen had to capture current issues which I felt strongly about (The Refugee Crisis, The Rise of Nationalism, Sweatshops, Inequality and so forth). The poster would outline the framework of this particular course. Charts and graphs representing an analysis of attendance / dropout rates and exam results (3 academic years) will also be made available. Moreover, students shortcomings and suggestions will also be explained. From my own personal reflection over 3 years facilitating this course, most attendees were given the chance to communicate accurately by considering diverse perspectives on socio-topics in a classroom environment. The course proved to be very popular. Indeed, what started as a 2-hour weekly slot has been extended to 4 hours as from 2018/2019 covering 2 different groups. Hopefully, this piloted model will be implemented in other institutions and the poster will attract and encourage others to proceed with the process.

52991 | Friday Poster Session: 16:00-17:00
Investigation of Process-oriented Guided Inquiry Learning as a Framework for Teaching Science-focused English Courses at a Japanese University
James Ellinger, University of Tokyo, Japan

Previous research indicates that inquiry-based learning is beneficial for English-language learners in content courses. Process-Oriented Guided Inquiry Learning (POGIL) is a student-centered, team-focused framework widely used in the United States at the high school and university levels for teaching science. All POGIL activities follow a 3-phase learning cycle and are often organized such that students are treated as learners of the language of science. Published research investigating the effectiveness of POGIL has been conducted primarily at the undergraduate level using material written in English with no distinction regarding the English level of the students. However, anecdotal evidence indicates that POGIL benefits English-language learners in content courses, even when they are mixed with native speakers. The goal of this study was to investigate student assessment of their learning gains when POGIL was used to teach a molecular biology-focused English course at a Japanese university. All students in the course were English-language learners. Students were either first- or second-year enrollees and approximately 66% were science-track students and 33% were humanities-track students. Results from this study show that students had a positive attitude toward the POGIL method and felt that the activity structure furthered their content knowledge as well as improved their English language skills.

52994 | Friday Poster Session: 16:00-17:00
Predictor of Impact of the Perceived Classroom Goal Structures on the Growth in Avoidance Behaviors via Shame
Shu-Ling Peng, Cheng Kung University, Taiwan
Biing-Lin Cherng, Cheng Kung University, Taiwan
Jon-Fan Hu, Cheng Kung University, Taiwan

This study was aimed to examine how contextual (i.e., the perceived classroom goal structures) and emotional (shame) factors would impact the change of avoidance behaviors. We conducted a school-year-long longitudinal study investigating the linkage of the perceived classroom goal structures (mastery vs. performance), shame, and avoidance behaviors. Methodologically, a math survey was administered with 427 participants of 7th grade students in Taiwan, and the researcher analyzed the collected data using the technique of structural equation modeling (SEM). First of all, the study revealed that the levels of perceived performance goal structure, shame, and avoidance behaviors increased over time, but not perceived mastery goal structure. Secondly, in cross-sectional analyses, it was shown that students who perceived their classroom more performance goal-oriented experienced more shame and adopted more avoidance behavior. Thirdly, in longitudinal analyses, it was found that students who perceived their classroom as more mastery goal-oriented at the beginning of their school years, could negatively predicted the growth of shame, and in turn predicted growth of avoidance behaviors. Moreover, growth in perceived performance goal structure positively predicted the growth of shame across a school year, which in turn positively predicted the growth of avoidance behaviors across the school year. In other words, growth in perceived performance goal structure had indirect impact on the growth of avoidance behaviors via the growth of shame over time. These findings suggest that classroom environments that focus on performance goals may exacerbate students to have more shameful experiences and to adopt more avoidance behaviors.

Friday Poster Session

53049 | Friday Poster Session: 16:00-17:00
Supporting Refugees in (Online) Higher Education: Between Independence and Interdependence
Belma Halkic, Munich University of Applied Sciences, Germany
Patricia Arnold, Munich University of Applied Sciences, Germany

Access to higher education for refugees has been a challenge to many host countries as well as for individuals concerned. Several initiatives emerged out of this situation trying to unburden access through digital educational offers (Colucci et al. 2017). Although research on access and success of refugees in the context of higher education has increased in the past years (among others Baywa 2017, Baker 2017, Naidoo 2015), still little is known about the situation of refugees in online education. This paper presents results from a research project that investigated student uptake of an online education offer by Kiron, an NGO that provides online curricula accompanied by various measures to support refugees as online learners and in transferring to regular universities. A mixed methods approach was applied including student data analysis (N=1375), a survey (n=180) and semi-structured interviews (n=25). Results show that many students use support services independent of the offered online curricula but in correspondence with their individual needs and life situations. They evaluate existing support positively, but also emphasize the need for more one-on-one support and opportunities to improve their language skills. Besides language as key barrier, students are facing combined challenges outside of education. Interviews reveal how difficult life circumstances are affecting usage patterns and the outcome of flexible and low threshold digital approaches which also seem to be (re)producing inequalities within a heterogeneous student population. Not least, results demonstrate the interdependence of refugees' needs on the one hand and the effectivity of support structures on the other.

53084 | Friday Poster Session: 16:00-17:00
International Students in Hybrid Courses: Using Grading Contracts to Create an Online Learning Community
Sarah Faye, University of California, Davis, United States

While research shows that contract grading improves learning habits (especially labor contracts with their focus on the effort students put in their work, rather than the quality of final products), there is no research on how contracts affect international students in hybrid courses. The purpose of this ongoing study is to show how labor contracts can help this student population by fostering independent learning habits and a strong sense of community. This is particularly important as the international student population continues to grow, and as students take online courses with restricted contact with instructors and peers. Labor contracts teach strong learning habits by asking students to make their own choices on how they want to demonstrate their effort; this helps international students become independent, but it is also important in the online context, where instruction tends to feel canned and impersonal. Being able to create their own learning path makes students more confident and connected to the material. Additionally, labor contracts counteract the fact that technology in hybrid courses tends to isolate students by creating a community of learners where one's success is interconnected with the success of others; for example, the labor contract can highlight group work and providing effective peer review feedback as key aspects of success in the course. To fulfill the contract, students must take the initiative of being reciprocal community members. Our assessment methods thus become tools in facilitating the growth and interconnection of our international students in online classes—preparing them for professional collaboration.

53093 | Friday Poster Session: 16:00-17:00
The Role of Lectures and Factors Affecting Individual Working Competency of Students at Thai Nguyen University, Vietnam Through Mathematical Modeling Process
Ngoc Dong thi, Thai Nguyen University, Vietnam
Bac Nguyen Trong, Thai Nguyen University, Vietnam
Nam Nguyen Danh, Thai Nguyen University, Vietnam

For university training, all teaching processes aim at developing and perfecting occupational competencies for learners. In the study of teaching mathematics at Thai Nguyen University, Vietnam, we consider mathematical modeling as a way to help students solve problems mathematically. Accordingly, the main role of teachers in these situations mostly include: to build learning environment, conduct research and practice, introduce methods and guarantee accurate content of math theory. Through the process of implementing mathematical modeling, independent working competency of students is influenced by two basic factors named psychological factors and individual competency factors. The research results show that the main psychological factors include attitudes, motives and willpower while individual competency factors include the competency to recognize occupational situations, the competence to switch between the practice and mathematics, the competency to use supportive technology in the process of working with mathematical models and randomly opening data sets.

53100 | Friday Poster Session: 16:00-17:00
Implementation of Self-regulated Learning in Ho Yu
Ma Yan Sze, Ho Yu College and Primary School, Hong Kong

Since 2012, Ho Yu launched the "self-regulated learning" (SRL) at Secondary one. We aimed at letting students become the owner of their own learning through systematic arrangements and implementations. It was not easy to initiate the new teaching and learning habit in school. In order to implement it smoothly, we had done some preparation on four aspects as "Administration arrangement", "Classrooms equipment", "Training of teachers" and "Training of students". After years of implementation and through several school visits, exchanges and repeated discussions, we have developed four core elements in SRL lessons: (1) Pre-lesson SRL worksheet: It helps establishing students' own independent preparation skills and their ability to self-learning. (2) Basic knowledge: Students are work in a small learning group. They will clarify some mis-understanding in the homework. (3) Discussion: Students get on group discussion and make a presentation on challenging question which is followed up by a peer and teacher questioning and reasoning interaction. (4) Self Reflection: Students evaluate the learning goals and their performance in the lesson. In order to review self-regulated learning (SRL) in a more objective way and elevate the teaching and learning effectiveness with a focus, we had invited professor and scholar to evaluate SRL in terms of "quality" and "quantity". The feedback and findings from the questionnaires are all encouraging. The student's performances in public examination are also improved. We believe that SRL is a good way to develop students as lifelong learners. It lets students own their learning and learn with dedications wholeheartedly.

16:00-17:00 | Orion (5F)
Friday Poster Session

53119 | Friday Poster Session: 16:00-17:00
Fourth Grade Students' Number Sense Performance on Four-Tier Test
Der-Ching Yang, National Chiayi University, Taiwan

This study examined fourth-grade students' number sense performance, reasoning, and confidence by using a four-tier number sense test (4TNST) comprising an answer tier, a reasoning tier for those answers, and two corresponding confidence tiers. Few studies have applied four-tier testing to mathematics education. A total of 982 Taiwanese fourth-grade students were selected to join this study. The online 4TNST could be used to diagnose the students' number sense performance, confidence in their answers and reasoning, and differences in confidence between answers and reasoning. In addition, the values of ΔANS and ΔRSN were all positive for each number sense component and the whole test, which implies that the students had higher confidence in correct than incorrect responses for both answers and reasoning. The contributions based on this study's findings are discussed.

53253 | Friday Poster Session: 16:00-17:00
A Review of the Risk and Protection Factors of Self-injurious Behavior of Adolescents
Yeonjae Jo, Dong-A University, South Korea

The purpose of this study was to present a comprehensive review of the literature for understanding adolescents' self-injurious behavior. This study reviewed 47 academic articles for the understanding of conceptualization, psychological characteristics, influencing factors of self-injurious behavior among adolescents. The authors implemented an exhaustive search for peer reviewed article for last 5 years on self-injurious behaviors. The risk factors of self-injurious behavior were nursing environment of childhood, difficulties in emotional control, negative self-image, psychological condition, psychosocial factors. The protection factors of self-injurious behavior were recognition of wounded self, goal of life, resilience, social support. Based on the literature review, the author provides the motivation, risk and protection factors of self-injurious behaviors. In addition intervention strategies for self-injurious adolescents such as support group meeting, mindfulness program were discussed.

53340 | Friday Poster Session: 16:00-17:00
Effectiveness of E-learning Amongst Nursing Students: An Innovative Approach of Learning the Electronic Documentation Systems
Feng Chunshu, Tan Tock Seng Hospital, Singapore
Hnin Nwe Oo, Tan Tock Seng Hospital, Singapore

This study examines the effectiveness of adopting e-learning in teaching hospital electronic documentation systems to the nursing students. This e-learning programme consists of PowerPoint slides and narrated videos which demonstrate the use of the electronic documentation systems. It was mandatory for all nursing students to complete this e-learning programme prior to their clinical practicum. Upon completion, the nursing students had to undergo a post learning quiz in which a 100% passing mark was set as completion criteria. At the end of the clinical practicum, the nursing students were invited to participate in a 11 likert scale questions survey to elicit their feedback on the effectiveness of the e-learn programme. 173 nursing students participated in the survey. 99.5% (172) of the students agreed that the learning content is relevant and prepared them adequately for their clinical practicum. Overall, 96.5% of the students agreed that they were able to accurately document patient data in the electronic systems and effectively gather patient's information from various electronic systems after completing the e-learning programme. The results revealed that e-learning using narrated video is an effective method in teaching electronic documentation systems usage. Nursing students also reported easy accessibility to the learning materials as reference during their clinical practicum. E-learning approach facilitates flexibility, self-directed learning in the novice learners and interactive strategies such as narrated video enhances the learners' understanding.

53373 | Friday Poster Session: 16:00-17:00
Design and Development of a Learning Management System for Flipped Learning
Paul L.C. Lam, The Chinese University of Hong Kong, Hong Kong
Kevin C.K. Wong, The Chinese University of Hong Kong, Hong Kong
Carmen K.M. Lau, The Chinese University of Hong Kong, Hong Kong

The flipped classroom model has grown in popularity among teachers in both secondary and higher education sectors over the past few years due to its noticeable benefits to students. In Hong Kong, we have also witnessed an increasing number of teachers across institutions and disciplines flipping their own classes. Along with exciting achievements, there have been numerous challenges faced by teachers. One common challenge is that students do not engage in pre-class learning as instructed, resulting in low participation in the high cognitive learning activities that teachers make so much effort to design. This lack of engagement can be attributed to 1) students' lack of motivation to do the preparations, and 2) insufficient monitoring of their learning by teachers. A learning management system (LMS) with strong monitoring features and functions to improve students' motivation and capacity for self-regulated learning may be one of the solutions to the abovementioned challenge. In 2018, we initiated the development of an LMS called FabuLearn (which stands for "Flipped And Blended University Learning") that is tailor-made to maximize the flipped learning experience. Unlike other traditional LMSs, FabuLearn is designed with a focus on monitoring and time-keeping functionalities, that enable teachers to understand students' preparations and learning progress at various stages of the flipped classroom process which most of the former LMSs overlooked. In this presentation, we will illustrate the design and development process of the LMS, explain how its features facilitate flipped learning with demonstrations and report initial user feedback.

Friday Poster Session

53382 | Friday Poster Session: 16:00-17:00
Mobile Devices as Effective Reference Tools in Undergraduate Studies
Misa Otsuka, Jissen Women's Junior College, Japan

Dictionary use is one of the most effective means of building one's vocabulary. In Japan, monolingual dictionaries were commonly used to confirm the spelling or forms of Chinese characters until the middle of the 1990s. Then, students began to switch from using paper dictionaries to using electronic dictionaries instead. Currently, neither type is prevalently used, due to the reduced amount of writing by hand and the advent of mobile devices. However, students in other countries use dictionaries differently. The increasing use of mobile phones is generally frowned upon by older people. This is inevitable because many students have not been taught how to correctly use such tools while studying. This present study investigates the possible use of mobile devices as reference tools both inside as well as outside the classroom and seeks the most effective and practical system for a proper introduction these tools. In this presentation, the findings of a pilot study conducted in a classroom will be reported. The results will indicate how students can be independent in their positive use of mobile devices as an aid while studying. In addition to this, the study will emphasize the interdependency between the unique features of mobile devices and sharing, both inside as well as outside the classroom.

53388 | Friday Poster Session: 16:00-17:00
Effects of the Incorporation of Flipped Classroom Approach with Cooperative Learning and an Instant Response System on an Unfamiliar Subject
Yu-Chen Chou, Feng Chia University, Taiwan

Two practical considerations motivated the design of this study. The course, Introduction to Linguistics, is often viewed as a difficulty to many sophomore English majors in Taiwan, owing to their unfamiliarity with the complexity of language structure and deep linguistic analysis. Such a class typically consists of more than 50 students, which poses many challenges to both instructors and students, mainly causing a lack of interaction between these groups. This large enrollment size may also deteriorate the level of engagement of many students, increasing feelings of alienation and declining motivation and attributions of responsibility. The purpose of this study, therefore, aims to design an alternative teaching method, creating a mixture of flipped classroom and cooperative learning with a web-based instant response system employed in class, and ultimately improve the effectiveness and efficiency of both teaching and learning. Two groups were presented—a control and experimental group (N = 54 and 61 in each, respectively). Focusing on cognitive and affective domain, the results of tests and questionnaires prior to and after the study indicate that: 1) students exposed to the innovative teaching approach reported significantly higher achievement test scores than those otherwise; 2) students with higher anxiety seemed to benefit more from this teaching approach than those with lower anxiety. These results can hopefully provide pedagogical implications for instructors who are facing the challenges of teaching unfamiliar subjects to larger classes, and educational researchers who are committed to new approaches in seeking to improve teaching quality.

53390 | Friday Poster Session: 16:00-17:00
The Potential of Rubrics as a Tool for Self Assessment: Consideration from an Interdisciplinary Perspective
Misa Otsuka, Jissen Women's Junior College, Japan

Rubrics are widely used within higher education, and their educational efficacy as a tool for self-assessment has been demonstrated. There are various types of rubrics, and even among rubrics based on the same concept, the ideal design of a rubric will vary depending on the academic specialty. Our research team is comprised of staff from different faculties and departments, and we promote the development of subject-specific rubrics in the specialized subjects of the departments to which we are affiliated, as well as the creation of general-purpose rubrics that can be used across departments. In this presentation, we will explore the potential of rubrics as a tool for self-assessment, focusing on the results of investigation into the words and phrases used in evaluation criteria within rubrics. Would like to present our findings that rubrics, rather than just being a tool for assessment, are also a means for specifically demonstrating the steps taken by teachers to reach the attainment goals and objectives of the class, as well as a means for students to achieve self-directed learning through self-reflection.

53436 | Friday Poster Session: 16:00-17:00
Textbook Vocabulary Coverage in Japanese University Student Mythology Essays
Dax Thomas, Meiji Gakuin University, Japan

This brief study explores the degree to which words encountered in a content class textbook are used by students in argumentative essays they write for that class. A corpus of 22 short student essays from a World Mythology English Seminar EFL class at a Japanese university was examined. First, using AntConc and the British National Corpus as a reference corpus, a keyword list was created for the textbook used in that class. This keyword list was then manually sorted into two separate lists, one of key non-culturally-related content words, and one of key culturally-related content words and proper nouns. Following this, these keyword lists were used as vocabulary level lists in AntWordProfiler to examine vocabulary coverage in the essay corpus. While there is still some analysis to be conducted, initial results show that the corpus of student papers covered 7.57% of the key non-culture-related word type list and 1.66% of the key culture-related word type list. The noun types "mythology" (occurring in 18 out of the 22 papers), "myth" (12/22), "stories" (14/22), and "history" (5/22) generally had a higher range in the corpus, while their counterpart adjectives "mythological" (7/22), "mythical" (5/22), and "historical" (3/22) had a lower range. It is also worth noting that while the textbook itself is fairly well-balanced in its coverage of cultures from around the world, of all the culturally-related keywords with a range of 2 or more, 50% of these were from Greek culture.

Friday Poster Session

53439 | Friday Poster Session: 16:00-17:00
How do Chinese Research Communities Perceive Game-based Learning?

Mingfong Jan, National Central University, Taiwan
Tieh-Huai Chang, Graduate Institute of Learning and Instruction, National Central University, Taiwan

We present an analytic framework for game-based learning (GBL) and a systematic review of GBL research published by Chinese researchers at the Global Chinese Conference on Computers in Education (GCCCE) since 2012. Proposed by Jan and Gaydos to better understand GBL research, the GBL analytic framework delineates (1) three research trends in game-based learning, (2) four learning objectives in game-based learning research and practices, and (3) three conceptualizations of game-based learning. We utilize the framework as a systematic analytic tool for GBL conducted by Chinese researchers from Taiwan, China, Hong Kong, and Singapore. Ninety-two conference papers published by the GCCCE conference are analyzed to identify trends and major characteristics. The findings suggest that: 1. Most researchers develop computational platforms and applications as opposed to conceptualizing GBL as innovative pedagogies or learning activities. 2. Most research utilize drill and practices to promote extrinsic motivation and content mastery on the learners. Learning that occurred in the learning processes, such as higher order thinking skills and social skills are often ignored and bypassed. 3. GBL is conceptualized as learning "from" games while games are viewed as "content providers." GBL is rarely viewed as learning "with" games where games afford authentic contexts for situated learning and scaffolded participation. The findings suggest that GBL in Asia is employed to reaffirm the established "drill and practices" learning culture in Chinese communities. A reconceptualization and reorientation of GBL for 21st-century literacies and competences is critical to move GBL research forward in Asian Chinese research communities.

53655 | Friday Poster Session: 16:00-17:00
Morphological Awareness, Syntactic Awareness and Reading Comprehension in a Second Language: A Study Involving Chinese and Filipino Students

Susanna Siu-sze Yeung, The Education University of Hong Kong, Hong Kong
Maryann Amoto Artizuela, Palawan State University, Philippines

Prior research has consistently shown that morphological awareness (MA), the conscious ability to manipulate morphological units in words, and syntactic awareness (SA), the metalinguistic awareness of the syntactical structure of language, are significant predictors for reading success in different orthographies. However, limited research has examined the role of MA and SA in reading comprehension in a second language (L2) in groups of ESL learners with different first language (L1). The present study investigated the role of MA and SA in L2 reading comprehension among Chinese- and Filipino-speaking children who learn English as a L2. Seventy-three (38 males) Chinese Grade 3 children and 81 (43 males) Filipino Grade 3 students were assessed on English MA, SA, word reading, vocabulary, reading comprehension and working memory. Adopting the theoretical model of simple view of reading, working memory, vocabulary, word reading were statically controlled in regression analyses which showed that MA is a significant predictor of English reading comprehension among Filipino ESL students and is marginal significant predictor of English reading comprehension among Chinese ESL students. For both groups of students, SA was not a significant predictor. The results highlighted the role of MA in early reading comprehension development in ESL students with different L1s. The theoretical and practical implications of the findings will be discussed from a developmental perspective.

53903 | Friday Poster Session: 16:00-17:00
Deeper Experiential Engagement Project (DEEP): Exploring Experiential Learning Strategies for Developing Student Learning Experiences

Christopher Hill, Nanyang Technological University, Singapore
Chun Chau Sze, Nanyang Technological University, Singapore
Wilson Goh, Nanyang Technological University, Singapore

The proposed study explores a new Deeper Experiential Engagement Project (DEEP) course at Nanyang Technological University, Singapore. The course objective is to employ experiential learning strategies to develop student learning experiences that engage local communities. And, to help students develop key metacognitive skills such as an inquiring mindset, critical analysis and creative synthesis. This DEEP course utilises the university undergraduate halls of residence as a platform for students to take disciplinary knowledge beyond the classroom. Students participating in the course gain credits for their participation. The course leverages students' natural interests in several areas of communication including film making, pod casting and graphic novel creation and puts the students through a team-based project with creative challenges that link them to academic disciplines (e.g.: the humanities and social sciences; art and design and communication studies.) Students are asked to seek out and engage local communities and explore their stories through the students' chosen area of interest. The structure of the courses submissions scaffold the Experiential learning process that closes the Experiential Learning Cycle, i.e. complementing hands-on experiences with reflective observation and abstract conceptualisation, which then manifests in the next round of decision-making and active experimentation. The proposed study will focus on whether combining Experiential learning with community engagement and student interests can help students develop their metacognitive skills. The study will use a case study approach. To assess DEEP the researchers will analyse student deliverables, conduct interviews with students and teaching assistants; and ask faculty to complete self-reflections.

15:45-16:45 | Room 601 (6F)
Friday Poster Session

53976 | Friday Poster Session: 16:00-17:00
How to Weave Computational Thinking into Curriculum: A Study on a University Course with VR
Sheng-Wen Hsieh, Far East University, Taiwan
Min-Ping Wu, Far East University, Taiwan

The twenty-first century is arguably the century of computing. In such a world saturated by computing, Computational Thinking (CT) is now recognized as a foundational competency for being an informed citizen and being successful in STEM work. The aim of this paper is to explore the influence on college students' learning performance of computational thinking with the teaching material of Virtual Reality (VR) infused into university courses. Three intact classes of 75 college students in Tainan City were recruited, and they were randomly assigned into three different groups: VR CT group, hands-on CT group and traditional CT group. This paper also built a computing learning website to guide the three groups of students to conduct CT courses. A pre-test and post-test for three groups, STEM Semantic Survey (SSS) and Career Interest Questionnaire (CIQ), Spatial Reasoning Instrument (SRI), CT Test (CTT), Climate Change Attitude Survey (CCAS) were applied. The results showed that VR CT course can enhance students' SSS, CIQ, SRI and CTT. Both VR and hands-on CT courses can enhance students' SSS, SRI and CTT.

54082 | Friday Poster Session: 16:00-17:00
Developing an Informal Tandem Learning Scheme for Young Researchers and Academics
Tanya McCarthy, Kyoto University, Japan
Matthew Armstrong, Kyushu University, Japan

The constant change in technologies and organizations today require higher education institutions to adapt just as quickly to the new situations. This is especially important for teachers in second language classrooms, as they try to prepare students for this changing world. In the EFL context in which this research took place, students were unable to find research partners to practice higher-level English in a more authentic environment. As such, a Tandem Learning (TL) approach was proposed. TL is recognized as an effective approach in improving the quality of the learning environment as ideally, the knowledge learned has intrinsic value to the learner and it can also be transferred to various real-world contexts. This longitudinal research project aimed to develop an informal TL environment in which students could freely practice research skills with students in other parts of Japan through video conferencing. The first step was to conduct a curriculum analysis to identify if the underlying principles were embedded within the curriculum and teaching practices. A Curriculum Analysis Framework was developed to address three areas: (1) Policy: The overall curricular vision, mission and directives; (2) Practice: Explicit and indirect approaches teachers use in the classroom; and (3) Process: The learning environment from the perspective of the learner. Following this, the TL program was able to begin. The Curriculum Analysis Framework will be presented along with pedagogical implications of implementing a TL approach in other EFL learning contexts.

54085 | Friday Poster Session: 16:00-17:00
The Influence of Low Birth Rate on Elementary School Administration and Teaching: A Study in Six Different Administrative Districts of Tainan, Taiwan
Tzong-Shing Cheng, Sanming University, China
Pei-I Wu, University of Kanning, Taiwan
Yan Tan, Guangxi University for Nationalities, China
Kuei-Yu Cheng, He-Shun Elementary School, Taiwan

Taiwan's fertility rate dropped sharply in recent years. The decreasing fertility has made a significant impact on overall education system, especially for elementary schools. Most of them are facing a predicament of downsizing. This thesis aims to explore how the phenomenon of low fertility affects the elementary school teachers' teaching method sand school administration in Tainan City. The research methods was a questionnaire approach. A total of 330 questionnaires were used, and 290 questionnaires were responded. 95.7% of the questionnaires were considered valid. From the research results, the main findings can be summarized as follows 1. Tainan City elementary school teachers on the status of the school administration and their teaching are in the middle higher level because of the low birth rate phenomena. 2. Tainan City elementary School teachers' level of awareness of the impacts of low birth rate on school administration differs based on different background variables: teachers acting as an administrative officer, working in small or medium-size schools or working in a different administrative district have high level of impacts. 3. Tainan City elementary School teachers' perception of stress on changing teaching strategies varies with different background variables: Younger teachers, less working experience ones, those who obtain a degree in university or college of education and those who work in small or medium-size schools would have higher stress at work. Based on the results of this study, the researcher offers suggestions for Education authorities, school administration, elementary school teachers, and future researchers.

16:00-17:00 | Orion (5F)
Friday Poster Session

54135 | Friday Poster Session: 16:00-17:00
Interdependence to Independence: Collaborative Efforts in Peer-Assisted Mock Objective Structured Clinical Examinations (MOSCES)

Faustine Yap, Tan Tock Seng Hospital, Singapore
Cecilia Anne Mahimy, Tan Tock Seng Hospital, Singapore
Shalimar Ramirez Dormitorio, Tan Tock Seng Hospital, Singapore

Since 2014 National Healthcare Group Residents began organising MOSCES for the medical students from Nanyang Technological University Lee Kong Chian School of Medicine. The purpose was to test students' competence in physical examination, history taking and clinical skills in preparation for the OSCEs. The Residents wrote case scenarios, recruited patients, served as examiners and ran the circuits. By 2018, to encourage peer-assisted teaching, LKC senior students started leading the MOSCEs, taking over the roles of the Residents. An independent structure was developed, whereby senior students (Year 4) took over the roles of the Residents and run the OSCEs for their juniors' (Year 3). The Residents now only need to vet the case scenarios that senior students wrote. A total of 76 student participants and 33 peer examiners completed a 4-point Likert scale survey. Participants gave a weighted average of 3.60 out of 4 (90 percentile) for questions relating to the OSCE format, 3.63 (91 percentile) on constructive feedback and debriefing and 3.81 (95 percentile) on whether if the MOSCEs benefited their learning. The examiners gave a weighted average of 3.62 out of 4 (91 percentile) on how these OSCEs hone their skills and knowledge, 3.44 (86 percentile) on their confidence to contributing to their junior's learning and 3.61 (90 percentile) on personal development. The new structure not only ensures sustainability, it encourages peer teaching and learning that reinforce concepts learnt and develop better skills and knowledge. A symbiotic environment where everyone can take charge of their learning had developed.

54339 | Friday Poster Session: 16:00-17:00
The Use of Local Genius in Strengthening Student Character

Tjep Dahyat, Indonesia University of Education, Indonesia

Strengthening Character Education is an education program in school whose chief goal is to reinforce student character through the harmonization of heart, mind and body. The program is part of the Mental Revolution National Movement in the context of realizing an advanced and civilized Indonesian nation. However, in reality, such a program has not had a profound impact on student character. One concerning problem is that students are not familiar with local cultures. Addressing this issue, this study used local genius as a medium for strengthening character education, Wayang Golek ((wooden puppet)—a form of performance art that grows and develops in West Java. This performance art not only presents a spectacle, but also encapsulates values that need to be practiced in life. The study was conducted at 16 public junior high schools in the city of Bandung, West Java province, where Wayang Golek performances were utilized as a media to foster character education. Findings reveal that the program serves a dual function, as a vehicle for preserving regional culture and at the same time a means for strengthening student character education. The latter was seen in the students' knowledge about Wayang Golek, the famous puppeteer, and the story in an intriguing performance concept, whereby the students as spectators could enjoy and love the performance.

54354 | Friday Poster Session: 16:00-17:00
The Analysis on School Self-evaluation Capacity Building Model and Important Connotation

Tsai-Feng Cheng, National Kaohsiung Normal University, Taiwan
Long-Ann Shen, Shu-Zen Junior College of Medicine and Management, Taiwan
Shu-Fen Tseng, National Kaohsiung Normal University, Taiwan
Huei-Chun Wu, Kaohsiung Medical University, Taiwan

Evaluation helps to maintain and enhance the quality of school education. In order to promote the spontaneous and autonomous management of schools, it is necessary to enhance school self-evaluation capacities and competencies. Research on evaluation capacity building (ECB) is an important trend in the evaluation of educational development, which can be used as an important theoretical basis for school self-evaluation capacity building (ECB). Presently, Taiwan lacks indicators appropriate to benchmarking ECB. For this purpose, through large-scale analysis and integration of the literature, this study elucidated information from the literature review, which found there are four main theoretical models for building evaluation capacity: Evaluation capacity building pathway model, evaluation capacity building measurement, integrative evaluation capacity building (IECB), and the expanded IECB model (EIECB). Each model has its own characteristics and limitations. To be able to build robust self-evaluation capacity via a more concise, appropriate and operable model, this study proposes a "Revised Evaluation Capacity Building (RECB)", and derives the following important connotations: including six variables such as personal factors, organizational factors, organizational capacity, organizational culture, output, and change, as well as 14 connotative aspects such as knowledge, skills, affective, leadership, learning environment, capacity to improve organization, effective use of information, open atmosphere, organizational learning, benefits' perception, knowledge acquisition, self-evaluation capacity, evaluation autonomy, and problem solving.

54416 | Friday Poster Session: 16:00-17:00
Inclusion of Children with Asperger's Syndrome in Regular School: A Case Study from Bangladesh

Md Shah Moazzem Hossain, Proyash Institute of Special Education and Research, Bangladesh University of Professionals, Bangladesh
Aouana Marzia, Proyash Institute of Special Education and Research, Bangladesh University of Professionals, Bangladesh

The case study investigated an intimate insight into a child with Asperger's Syndrome (AS) and family experiences of inclusive education enrollment in Bangladesh. Data was collected in precise details and explicit information about the child with AS on his involvement in different inclusive education activities. A case study method was employed to explore the extent of academic and disciplinary achievement of the child. The analysis includes the existing feasibility of regular school system to include a 6 years old special child as well as the child's socio-academic achievements within the educational institutions. Findings indicate that the school culture and the state policies for practicing inclusive education, particularly for the children with special need, is divergent while hardly meeting the socio-academic achievement of a young learner in the current education system. The study recommends further in-depth case analysis of the urban school culture in the context, to have an insight into the regular school system for including the vast increasing special need children of the country.

15:45-16:45 | Room 601 (6F)
Friday Poster Session

54443 | Friday Poster Session: 16:00-17:00
The Effectiveness of Character Education in Special Education Curricula for Students with Mental Retardation at Special School in West Java
Deded Koswara, Indonesia University of Education, Indonesia
Dasim Budimansyah, Indonesia University of Education, Indonesia
Ace Suryadi, Indonesia University of Education, Indonesia

The addition of character education in the 2013 special school curriculum or commonly called the K-13 curriculum, has a significant influence on learning services in special schools. Implementation of character education becomes mandatory for all students including, students with mental retardation. Some teachers have tried to implement character education with a variety of learning strategies that integrate character education with special school curriculums of 2013, but currently have not found a model or learning strategy that is considered suitable for character education of students with mental retardation. This qualitative research analyzes the cases of students with mental retardation who study in special schools in West Java Indonesia. The discussion focused on developing character education learning strategy for students with mental retardation in developing the value of independence, discipline, and responsibility. We then suggest recommendations for improvements in implementing character education at special school in Indonesia.

54456 | Friday Poster Session: 16:00-17:00
Development of a Questionnaire System with a Response Analyzer
Hirotaka Azuma, Tokyo Denki University, Japan
Hironobu Takenouchi, Tokyo Denki University, Japan
Tatsuyuki Takano, Kanto Gakuin University, Japan
Takashi Kohama, Tokyo Denki University, Japan
Osamu Miyakawa, Tokyo Denki University, Japan

It has been increasing that the number of universities which try to give a bidirectional lecture by improving the contents of it from responses of students. To achieve this, instructors need to know them efficiently and easily. Questionnaires are general methods used to grasp the situation of students. A lot of universities have been adopting them. In general, instructors collect the results of questionnaires after their classes and examine them to improve their next lectures. However, it is difficult to understand students' questions and responses during classes since questionnaires are distributed after them. In order to solve this problem, a response analyzer can be used to make it easier to grasp students' reactions. A response analyzer is an educational device that aggregates students' situation and shows the results of it in real time. Instructors can fix their lectures according to them during their classes. In this study, a questionnaire system has been developed with the response analyzer. Adding to the existing questionnaires, this study's system enables instructors to make a single-question questionnaire and let students answer it. Instructors can know the results in real time with graphs and tables. They can improve their lectures not only after classes but also during them. Although there is also a problem that many of the existing response analyzers need specific devices and introduction costs, this system can be used through a browser and is easy to be introduced to a lecture since this system has been developed as a web application.

54472 | Friday Poster Session: 16:00-17:00
Analysis of Visuals in Political Science Textbooks to Identify its Role in Encouraging Higher Order Thinking in Students
Pallavi Ekka, Publicis Sapient, India

Visuals, including photographs, sketches, and schematic diagrams, are a valuable aspect of textbooks. Visuals in the textbook attract attention and help in the retention of information. It also enhances understanding and creates a context for learning. Schools are also emphasizing 'higher-order thinking (HOT)', rather than memorization of a cannon of topics. HOT occurs when a person takes new information and interrelates and/or rearranges and extends this information to achieve a purpose. This study identifies and analyses the role of visuals in political science textbooks in encouraging HOT in students. This study is based on the textbooks of the National Council of Educational Research and Training (NCERT) for classes 6–10. On the basis of their relationship with the content, visuals were categorized as Interactive (physical interaction with the visual), Promptive (thought-provoking questions asked on the visual), Representative (visuals supporting text), Antecedent (visuals explained in text), Nested (layers of information in one visual), Intersecting (no explicit relation between visual and text). Of these categories, Interactive, Promptive, Antecedent, and Intersecting visuals are tools for HOT with different levels of complexity. The overall percentage of visuals that encourage HOT is 48.37% (39.3% photos; 54.9% illustrations). The highest percentage of HOT encouraging visuals were found in class 7th (70.73%). Interactive visuals were found to be higher in class 6th and 7th. Promptive visuals were highest in class 8. Antecedent and Intersecting visuals, though their level of complexity is high, were found to be higher in class 6th and 7th as compared to 9th and 10th.

54527 | Friday Poster Session: 16:00-17:00
Assessment of Generic Skills of Engineering Students Through Group-Based Learning
Namita Maharjan, National Institute of Technology, Nagaoka College, Japan
Kyohei Kuroda, National Institute of Technology, Miyakonojo College, Japan
Makoto Ichitsubo, Nagaoka University of Technology, Japan
Takashi Yamaguchi, Nagaoka University of Technology, Japan

This study was carried out for addressing the impact of group based learning on generic skills development in engineering students. A workshop was conducted for 3 days with a total of 12 students from different engineering departments. The students filled in the questionnaire after every workshop for 10 selected generic skills. The results of this study indicated that the group based learning have positive impact on the development of generic skills. When all the generic skills for group and individual were assessed, the overall skills were more developed in group than individual assessment. Moreover, the group assessment showed the highest improvements for understanding, teamwork and communication skills. When the inter-relationship among the skills were assessed for individual ratings using network analysis, the results revealed that the effective team work was strongly associated with co-operativity, communication and information sharing. The significant finding of this study is that group work based learning could be an effective teaching tool for producing innovative manpower.

Friday Poster Session

54533 | Friday Poster Session: 16:00-17:00
Exploring Variables Predicting Dropout in Universities of South Korea: Focusing on K University in Gangwon Province

Joonmo Yun, Gangneung–Wonju National University, South Korea
Yunseon Cheong, Gangneung–Wonju National University, South Korea
Daesik Kim, Gangneung–Wonju National University, South Korea
Hee Jae Lee, Kangwon National University, South Korea

The purpose of this study is to investigate variables predicting dropout in Universities of South Korea using data-mining techniques. For this purpose, we collected the data of 4,175 students composed of 892 dropout students and 3,283 graduates from K University in Gangwon province for 2010-2013. In the analysis process, we arranged the data according to the student's individual characteristics, university-related characteristics, high school-related characteristics, university life-related characteristics, and academic characteristics. We then used descriptive statistics to identify the overall characteristics of the students and conducted an ANOVA test to compare the characteristics of dropout students and graduates. Finally, we applied logistic regression analysis to explore the variables that predict students' dropouts. The results of the analysis are as follows. First, since male students are more likely to drop out than female students, it is necessary to help male students recover the meaning of college life by providing intensive mentoring services. Second, the lower the grade is, the more likely they are to drop out. Therefore, it is recommended to provide support programs for new students, such as helping them make plans for future career and introducing various school activities for college life. Finally, the results of the logistic regression analysis suggested that 73.3% predicted the dropout from the collected variables. Based on these results, we discussed the limitations of this study and the direction of future research.

54556 | Friday Poster Session: 16:00-17:00
Using Learning Analytic Technique to Visualize STEM Education Model in Northern Part Thailand

Apansarin Kanarat, Sodsri-Saritwong Foundation, Thailand
Kongklat Kespechara, Sodsri-Saritwong Foundation, Thailand
Chonlada Sittitoon, Sodsri-Saritwong Foundation, Thailand
Somying Salthanu, Sodsri-Saritwong Foundation, Thailand

Science education in Thailand needs significant reform, as shown by PISA examination (2015), in which high-school students were 52nd in science, (out of 72 countries) STEM education plan (Science, Technology, Engineering, Mathematics) was introduced to secondary school via the Wisdom Cultivating Project to improve matters, combined with RBL (Research-Based-Learning) and PBL (Project-Based-learning). The approach employed a process of training and coaching teachers from the central office of the Wisdom Training Program (WCP) to the coaching 8 universities in Thailand, Phayao University as Northern mentors who teach teachers and teachers to continue teaching students. The data of project implementation had been brought to the analysis by means of big data analytics and learning analytics with the modification of unstructured data into structured data to be analyzed with the tagger-bot to determine the relationship of the data and the 21st-century skills. All 929 files, unstructured data, of learning outcome reports from WCP and the trainers including teaching plans, objectives, learning process and measurement of learning outcome, were divided to 27,600 paragraphs and transformed to structured data. The analysis revealed that the transfer of 21st-century skills such as learning and innovation (Critical Thinking, Communication, Collaboration, Creativity), life and career skills (purposes, execution, etc.), information and technology skills. The highest count of 21CSKs are 2,289 tag of flexibility and adaptability skill, 1,611 tags of critical thinking and 1,006 tags of collaboration. These results confirm 21CSKs can transfer from WPC to mentors and contribute to development of students' 21CSKs empower teachers, and transforming the existing lecture-based teaching paradigm in Thailand.

54585 | Friday Poster Session: 16:00-17:00
Towards Resilient and Sustainable Society: A Case Study of Education for Disaster Risk Reduction in Ise City

Yasuhito Kawata, Disaster Reduction and Human Renovation institution, Japan
Kensuke Takenouchi, Kyoto University, Japan
Katsuya Yamori, Kyoto University, Japan

After the Great East Japan Earthquake in 2011, the phase of disaster reduction in Japan has shifted. Now more people pay attention to the next earthquake and tsunami. Also, climate change has affected Japan, so the risk of floods and landslides are increasing. Now the education program for Disaster Risk Reduction can play a more critical role in our society. There is growing evidence to show that most top-down disaster risk management and responses programs fail to address specific local needs of vulnerable communities. Because of ignoring the potential of local resources and capacities, in some cases, may even increase people's vulnerability. At Ise City in Japan, Nakajima Elementary School has a special event in June for Disaster Risk Reduction with Local Community. The community residents provided lectures to students, and they had a workshop with students and their parents. This program started in 2015, for the first three years the professionals and researchers provided lectures to students, and in 2018, the community residents became lecturers. After these lectures, they have a workshop. About 200 people (included 10-12 years-old students) joined the event with their parents. At the workshop, they discussed the evacuation timing (called "Evacuation Switch"). The Education for Disaster Risk Reduction can solve various social problems as well as Disaster Risk. Also, this kind of education is more and more required because the SDGs Goal 11 shows "Make cities and human settlements inclusive, safe, resilient and sustainable."

Friday Poster Session

54710 | Friday Poster Session: 16:00-17:00

The Application of Wool Felt Hand-made to the Teaching Workshop for Clinical Nursing Preceptors and New Nursing Staffs

Pei-Fang Lee, Hsinchu MacKay Memorial Hospital, Taiwan
Wei-Yi Chia, Hsinchu MacKay Memorial Hospital, Taiwan

Background:Clinical nursing preceptors are the most critical bridge for new nursing staff during the adaptation period. They help to solve important factors such as new nursing staff turnover rate, realistic shock and dissatisfaction, help them get familiar with the work as soon as possible, become professional nurses, and increase job satisfaction. It is important to assist clinical nursing preceptors and new nursing staff to unite their centripetal force. Objective:The purposes of the project were to apply the wool felt hand-made in the workshop for clinical nursing preceptors and new nursing staffs and evaluate its effects on the learning outcomes. Methods:Through the wool felt hand-made and group motivation courses, clinical nursing preceptors and new nursing staffs can learn and communicate together. Clinical nursing preceptors and the new nursing staff who personally guide involved together to stimulate creativity and sharing, as emotional expression and professional value recognition. A semi-structured questionnaire was administered to the participants after the sessions to evaluate the their perceptions. Results:A total of 93 participants participated in the two courses included 55 clinical nursing preceptors and 38 new nursing staffs. 80 participants completed the satisfaction questionnaire (filling rate 86%), and the overall satisfaction was over 90%. They thought this course was a fun, stress releasing and inspiring learning experience. They felt the interaction of learners was very good. Conclusion:Clinical nursing preceptors and new nursing staffs are learning communities. Harmonious relationships and good communication help to learn and adapt. Applying hand-made lessons and sharing helps to unite with each other.

Notes

Saturday November 02

Parallel Sessions

09:00-10:15 | Room 601 (6F)
Saturday Session I
Education & Difference
Session Chair: Piroonrut Poonyalikit

52997   09:00-9:25 | Room 601 (6F)
The Heart of Teaching in a High Progress Class
Hui Min Kwok, Ministry of Education, Singapore

Students in Singapore take on their first National examination at the age of 12 - Primary School Leaving Examination (PSLE). Their results from the PSLE determine the Secondary School that they can attend. Hence, Primary 6 students spend a large part of the last 2 years of their Primary school education, focusing on scoring well for the PSLE. This is even more so for students in high progress classes who spend mindless hours on practice papers and tuition classes, resulting in undue stress in young learners. Often, they see their peers as competitors who would challenge their standing in the secondary school of their choice. This presentation takes attendees through a journey of how a Singapore teacher preps her graduating classes, the top class in the school to look beyond the PSLE, creating an environment in which they desire to learn beyond the curriculum requirements, developing a sense of awareness of themselves and those around them, their place in society and a genuine love for learning that will go beyond a result that seemingly 'defines' them. Attendees will see how the teacher works with both the parents of the students and the students themselves to redefine the meaning of academic excellence.

54052   09:25-9:50 | Room 601 (6F)
Gifted Education, Learning Disabilities and Agenda-2030
Sukaina Ishrat, Mombusho Scholars Association of India, India

Lewis Terman (1877-1956), best known for his thought-provoking study "Genetic studies of Genius" on gifted children had concluded that those with exceptional intelligence also needed exceptional schooling. In fact, gifted children with specific learning disabilities are the most neglected segement of student community. Teachers and other stakeholders often overlook the signs of intellectual giftedness and focus attention on other deficits. The paper explores the causes of obvious talent of gifted children not being realised and current policies/practices with regard to defining, identifying, educating and creating an awareness about this unique sub-group of students who posses both superior intellectual ability and specific learning problems. Gifted students with learning difficulties are bright, sensitive and acutely aware of their difficulties in learning such as inability to master basic spelling or reading skills, lack of attention in class but they may demonstrate exceptional analytical/creative abilities and sophisticated problem- solving skills. Assessing such potential in young children needs a wide range of information from IQ tests, diagnostic achievement tests, parent interviews and test of aptitude/creativity etc. The paper points out that adequate research, awareness and special needs of this segment of students has been very limited mainly in developing countries. It calls for timely intervention at appropriate level to avoid great loss of intellectual potentials of such gifted students as an ongoing process towards successful achievement of Global Development Agenda-2030 as adopted by UN General Assembly.

52010   09:50-10:15 | Room 601 (6F)
Challenges of Creativity-based International STEAM Camps to Inspire and Motivate Gifted Students
Piroonrut Poonyalikit, National Science and Technology Development Agency (NSTDA), Thailand
Sopida Pananusorn, National Science and Technology Development Agency (NSTDA), Thailand
Pankamon Sornsuwan, National Science and Technology Development Agency (NSTDA), Thailand
Akekalak Tungrattanavalee, National Science and Technology Development Agency (NSTDA), Thailand

NSTDA is the national science and technology research center in Thailand. One of its missions is to develop and prepare competent human resources in science, technology, engineering, art, and mathematics (STEAM). Organizing STEAM camps for gifted students are among our highlighted activities.Gifted students have the highest potential to become innovators in the future if we nature them properly.We engage and encourage them to express their curiosity, creativity and talents in STEAM. Each year, we organize several national camps and a few international camps.One of camps we organized was at the 15th Asia Pacific Conference on Giftedness:APCG2018 Youth Camp on the theme "Inspiration,Motivation,and Creativity:Leading the way to Giftedness", Keys to our success in this APCG2018 Youth Camp (STEAM camp) were integration of fun, hands-on, open-ended,and challenging problems in a friendly and non-judgmental learning environment. There were two types of sessions: plenary for all participants,and special activities allowing participants to pick and choose activities that suited their individual interests.Each participant was able to select one session out of six break-out sessions.Examples of activities included Creativity Gym,Create Art by Applying Math, Design Thinking for Kids, and Smart Entrepreneur.Results from the survey show that the STEAM camp encouraged and developed creativity skills. Overall,the participants' satisfactions score was 3.27 of 4.00 (Excellent level). Furthermore, the STEAM camp had motivated students to have positive attitudes in science,technology, engineering, art, and math, showed by the top score of satisfactions of the Creative Gym activity which got 3.50 of 4.00 (Excellent level). Challenges in running STEAM camps for gifted children from multi-cultural background and covering a wide range of age groups will be presented and discussed.

09:00-10:15 | Room 603 (6F)
Saturday Session I
Teaching Students with ASD
Session Chair: Hui Yong Tay

53285   09:00-09:25 | Room 603 (6F)
Teaching Students With Autism Spectrum Disorder (ASD): An E-module for Teacher Training in the Lao People's Democratic Republic
Somchay Makesavanh, Souphanouvong University, Laos
Hui Min Low, Universiti Sains Malaysia, Malaysia
Lay Wah Lee, Universiti Sains Malaysia, Malaysia
Tze Peng Wong, University of Nottingham Malaysia, Malaysia
Ann Sien Sut Lee, Universiti Sains Malaysia, Malaysia
Bounthieng Vongsouangtham, Souphanouvong University, Laos

The global prevalence of autism spectrum disorder (ASD) has increased markedly in recent decades. However, many mainstream teachers are lacking knowledge and skills to teach students with Autism Spectrum Disorder (ASD) in inclusive settings, particularly in the least-developed countries. To address the issue, we designed an e-module called 'The Story of Khamdy', which is uploaded onto Facebook Social Learning Platform as a free online resource. A novelty of this e-module is the presentation of a story through the compilation of 160 pictures that illustrate the everyday experience of a boy with ASD called Khamdy and how his parents and teachers helped him cope with daily living challenges. The acquisition of knowledge from the story was reinforced by 100 quiz questions which were designed to facilitate knowledge recalling and retention. The generalization of knowledge was enabled by the application of CCAF model (the initials stand for context, challenge, activity, and feedback) in the design of 12 assessment questions of this e-module. In a preliminary study, the social validity and user satisfaction of this module was assessed to inform the effectiveness of this e-module as a virtual interactive e-learning application for the purpose of ASD teacher training in Lao's People Democratic Republic, a country categorized as one of the least-developed countries by the United Nations. The social validity was assessed using the adapted Intervention Rating Profile while the user satisfaction was assessed and analysed according to Kano's customer satisfaction model. The findings offered insights to inform future trend in teacher training using open-access online resources with proven effectiveness and sustainability.

54530   09:25-09:50 | Room 603 (6F)
Initial Invention of Therapy Table for Autism to Avoid the Table Being Pushed or Flipped by Autistic Children
Dwi Purnamasari, Sebelas Maret University, Indonesia
Lulu Purwaningrum, Sebelas Maret University, Indonesia

In individual therapy for autism, a problem occurs in which autistic children often push the therapy table. Further, in children with large posture, they can even flip the table upside down during tantrums because their energy can no longer be held by the therapists. This behavior disrupts the course of the therapy. This research was conducted through observations on 12 autistic children (9 boys, 3 girls) using video recordings, each in one duration of individual therapy session. Interviews were carried out with 20 therapists and parents of children with autism to determine the sitting habits of the autistic children, and find out how the children push the table. The results showed that 25% of children with autism pushed the therapy table, causing the table to flip upside down, while the rest of the children only displaced the table. The study identified the sitting habits of autistic children so that alternative table design recommendation using an addition of bottom mat was formulated. The mat addition attached at the bottom of the table can be used more effectively during therapy. The results of this study can be taken into consideration when designing therapy tables for autistic children.

52587   09:50-10:15 | Room 603 (6F)
Assessment for Learning in an Inclusive Classroom: Questioning and Feedback for Learners with Autism Disorder Spectrum
Hui Yong Tay, National Institute of Education, Nanyang Technological University, Singapore
Kiak Nam Kee, National Institute of Education, Nanyang Technological Institution, Singapore

Much has been written about "Assessment for Learning" (AfL) which many teachers understand to be "the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there" (Assessment Reform Group, 2002). In addition, the prevailing discourse on Assessment for Learning (AfL) seems to suggest that it functions in the same way across different contexts. However, it is conceivable that AfL conceptualized for mainstream contexts need to be differentiated for children with special needs in an inclusive classroom. This paper presents the findings of a study that focussed on questioning and feedback dialogue in mainstream classrooms that included high-functioning students with autism spectrum disorder (ASD). Through observing six mainstream teachers from five schools during lessons and separately interviewing the teacher and students with ASD, the researchers found that effective approaches focused on three considerations: addressing the cognitive needs of these students (e.g. precise and direct questions); their socio-emotional needs (e.g. affirmative feedback); and using supporting structures (e.g. visual cues). These three considerations of cognitive, socio-emotional and support needs provide a handy framework to guide practising teachers and teacher-educators. In addition to informing practice, the findings have implications on AfL theory as they expand our current limited view of AfL through the lens of those with special education needs.

09:00-10:15 | Room 604 (6F)
Saturday Session I
Language Learning- Writing
Session Chair: Tracy Zahradnik

53890   09:00-9:25 | Room 604 (6F)
Peer-assisted Seamless Language Learning (PASLLI): A Theoretical Framework to Develop Student and Student Peer-mentor English Academic Writing Skills
Edward Bacon, Rangsit University International College, Thailand
Timothy Boundy, Rangsit University International College, Thailand

The most effective form of feedback is teacher feedback, but in many cases, this is not always possible so the most suitable alternative form of feedback may be peer feedback. In this study, the researchers developed a framework incorporating peer-assisted learning (PAL) with seamless language learning (SLL) as part of an English writing course's curriculum in an effort to develop the participants' grammar and academic English writing skills. This newly synthesized framework has been established as peer-assisted seamless language learning (PASLL), as the outcome of this study should be able to aid higher education educators in how to accurately organize and operate a peer-assisted seamless language learning (PASSL) center as a part of a course's curriculum at their respective universities, and the types of results they could achieve. This mixed-method study, which was conducted at an international college in Thailand, found that by synthesizing elements to establish the PASLL framework, student academic skills could be developed in such an academic environment. While the participants' grammar skills developed in this study, they did not significantly develop; whereas the participants' academic English writing skills did significantly develop. With the world of academia incorporating more and more innovative academic projects or other courses of actions in order to augment student skills in various areas, PASSL centers could also be utilized to develop student writing skills, as well.

54393   09:25-9:50 | Room 604 (6F)
Identifying The Effects of Process-Genre Approach Writing Towards Senior High School Students' Writing Performance
Erly Mulfias Yuli, University of Indonesia, Indonesia

This study investigated the effects of process-genre approach writing task towards the eleventh grade high school students' writing performance in an English as a Foreign Language (EFL) context. The students were assigned to finish writing task in two genres. In the first task, students were asked to write cause-effect text. In the second task, students were asked to write recount text. The purpose was to find out whether using process-genre-approach in two different genres would help students to develop their writing in the same quality performance. It was conducted for about four months with thirty four eleventh graders and an English teacher participated in this study. This study used mixed method (qualitative and quantitative) and data were collected by using direct observation, and students' writing pre- and post-tests. Students' writing tasks were assessed using analytic scoring rubrics. The findings show that students' writing performance in both two genres, cause effect and recount text, had a higher score. By this finding, implementing this process-genre approach in English writing classes could develop EFL students' writing performance both in cause effect and recount text. It also facilitated the students to prepare the senior high school students' ability to write academic writing in other genres. For students, they also could raise their awareness of language feature, generic structure, and the process of writing they used in their writing. However, teachers should also consider students' linguistics knowledge in choosing genre texts level for students' writing tasks.

52998   09:50-10:15 | Room 604 (6F)
Teaching about Citation and Plagiarism in First-year EFL University Courses in Japan: A Case Study
Tracy Zahradnik, University of Toronto, Canada
John Rast, Independent Scholar, Japan

Integration of sources to help support claims in academic writing and presentations is a critical skill to develop during an undergraduate degree. A solid understanding of plagiarism and academic integrity can help students understand why citation is important. Understanding and the extent of formal instruction of this topic can vary in different cultures with a higher level of emphasis being placed in Western than Asian cultures. As many students studying at Asian universities choose to study abroad as undergraduates or continue their studies at a graduate level abroad where citation expectations are different the importance of developing this skill is increasing. This presentation will explore the literature on the topic of instruction of citation in ESL and EFL higher education in Japan and some recent events that have forced changes in this area. It will then look at a case study where foreign lecturers were asked to teach about plagiarism and citation in first-year English writing and communication courses in an EFL immersion environment at a Japanese university. This case study will be explored through a discussion on the techniques deployed in instruction during the courses and how they were modified in subsequent years based on student questions and assignment quality; sample worksheets and lecture slides will be shown and explained; and lessons learned and advice will be discussed. Finally this presentation will compare the techniques described in teaching about citation and plagiarism to the approaches taken in a Canadian university.

Saturday Session I

Student Teachers

Session Chair: Natthapol Jaengaksorn

53183   09:00-09:25 | Room 605 (6F)

Development of Learning Modules for Enhancing Classroom Action Research Skills of Student Teachers

Suwimon Wongwanich, Chulalongkorn University, Thailand
Chayut Piromsombat, Chulalongkorn University, Thailand
Kanit Sriklaub, Chulalongkorn University, Thailand

A crucially important quality student teachers preferably possess in order to facilitate their own learning and career relates to classroom action research skills. This study aimed to design learning modules for enhancing classroom action research skills among student teachers. This design-based research was divided into three phases. The first phase was the development of the design principle in order to form the conceptual basis for arguments in learning modules. The second phase involved the experiment on the implementation of the learning modules on five groups of student teachers in diverse contexts. Data were collected using observation and assessment of classroom action research reports. After that, the data content was analyzed. The final phase dealt with the presentation of the new design principle by adopting lessons from the learning modules. The results were as follows. First, there were six learning modules for classroom action research, and 14 weeks of treatment adaptation. The design principle of learning modules created knowledge and skills for classroom action research as well as improving awareness, attitudes, self-awareness and research commitment. Second, the result of the experiment of the learning modules revealed that student teachers held the opinion that classroom action research was not difficult and they understood its benefits. The result of the assessment revealed that student teachers had the right knowledge and products followed the principles of classroom action research. Third, the new design principle was the interaction between students and the classroom action research activities and that consistency was necessary throughout the whole process.

54404   09:00-09:50 | Room 605 (6F)

A Causal Model of Student Teachers' Ambition for Becoming Teachers

Natthapol Jaengaksorn, Chiangmai University, Thailand

Student teachers' ambition for becoming teachers is crucially vital in effectively making the decision to be in the teaching profession. The current research endeavor attempted to 1) study levels of motivation to be teachers, pedagogical knowledge, awareness of their teaching abilities, and the ambition for having a teaching profession. 2) Also, the current research study developed and investigated the causal model of student teachers' ambition for becoming teachers. The sample consisted of 350 student teachers from three universities in Chiang Mai (Chiang Mai University, ChiangMai Rajabhat University, and The Far Eastern University). The data was collected by means of a questionnaire with the reliability of 0.94-0.95 and analyzed by using descriptive statistics calculated by SPSS. Also, the model for structural equation was analyzed using Mplus. The results revealed as follows: 1. Student teachers were highly motivated to become teachers and possessed a high level of pedagogical knowledge, awareness of their teaching abilities, and ambition to become teachers. 2. The developed causal model of student teachers' ambition for becoming teachers was consistent with the empirical data. Factors that influenced their ambition included the motivation to become teachers, the awareness of their teaching abilities, and pedagogical knowledge, all of which had a direct impact on their ambition for becoming teachers. Meanwhile, pedagogical knowledge indirectly affected the ambition for becoming teachers through their awareness of teaching abilities.

09:00-10:15 | Room 607 (6F)
Saturday Session I
Teaching Experience: Social Sciences & Humanities
Session Chair: Waiming Ng

53357   09:00-09:25 | Room 607 (6F)
The Traits, Attitudes, Skills, and Knowledge (T.A.S.K.) of Social Studies Student Majors
Teddy Fernandez, Pangasinan State University-lingayen Campus, Philippines

The dominant view in teaching social studies remains that of 'the integrated study of the social sciences and humanities to promote civic competence, as defined by The American National Council for Social Studies. By civic competence is meant, generally, the virtue of good citizenship that must be developed in every learner. Aside from emphasizing cognitive domain in teaching-learning process, the superior objective of social studies instruction is more of the affective or geared toward values education. In brief, this study: (1) Described selected profile variables of respondents' Social Studies Student Majors; (2) Examined the required Traits, Attitudes, Skills, and Knowledge explicit and/or implicit from Curriculum, Syllabi, and Programme Objectives; (3) Identified and analyzed major Traits, Attitudes, Skills, Knowledge that future Social Studies teachers should possess; (4) Recognized those Traits, Attitudes, Skills, Knowledge already possessed by respondents'; and (5) Proposed suggestions to fill gap/s between T.A.S.K. already possessed against those which respondents' lack. This study adapted a mix of quantitative and qualitative methods and tools. A survey was administered and a set of qualitative methods (content/documentary analysis, interview, classroom discussion and observation) was applied to derive a full understanding of the respondents' perception. Data indicates that there are indispensable listing of positive Traits, Attitudes, Skills, and Knowledge (T.A.S.K.) that future Social Studies teachers should nurture and retain. These lists of T.A.S.K. could be basis for becoming an ideal Social Studies teacher and also as approach for effective teaching and learning.

50957   09:25-09:50 | Room 607 (6F)
Doubting History
Irene Borras, University of Santo Tomas, Philippines

History as a science is ever evolving. Like those in the natural sciences, history should be not be seen as a dead-end subject. A course to take just to pass since it is part of the curriculum. One should use their knowledge in history as an instrument to surpass the suffering of the present time. The historian brings with them their biases in writing history. He or she is a product of their own milieu. Each milieu has its own characteristic: its political, social economic and cultural aspect differs from the other milieu. As an individual, the historian is also influenced by his own upbringing, his educational background, economic status, and his political background. Thus, he is never free from his own biases which can be manifested in his work. This paper will focus on popular misconceptions about Japanese colonization in the Philippines and will try to debunk it through scientific analysis and the use of primary sources. It will further discuss the causes of such misconception. The paper will aim to offer a new perspective in looking at this period in Philippine history. Finally, it is the objective of the research to introduce a culture of doubt in history and back it up with sufficient and credible sources.

53781   09:50-10:15 | Room 607 (6F)
Humanities and Impact Case Study in Hong Kong Higher Education
Waiming Ng, Chinese University of Hong Kong, Hong Kong

Nowadays, an impact case study has become an important part of assessment of the performance of individual academic programs. Unlike traditional methods of assessment that pays attention to academic publications and research grants, the impact case study focuses on social and economic impact and knowledge transfer. The rise of the impact case study has changed the academic environment in higher education. Now major programs are reaching out to the industries, government sectors, secondary schools, and the general public to share their knowledge and work with them to develop products. Higher education institutes in Hong Kong will introduce impact case study in 2020 and humanities disciplines feel that they are at a disadvantage in this assessment exercise. Using Japanese Studies at the Chinese University of Hong Kong as an example, this paper shows the challenge of the humanities to prepare for the impact case study.

Saturday Session I

Higher Education

Session Chair: Joying Chu

52663   09:00-09:25 | Room 608 (6F)
The Science of the Banana Cake – Development of Integrated Instruction on Science Knowledge and Skill by Using Hands-on Activities
Jutharat Sunprasert, King Mongkut's University of Technology Thonburi, Thailand
Thiti Jarangdet, King Mongkut's University of Technology Thonburi, Thailand
Chayanuch Watthana, King Mongkut's University of Technology Thonburi, Thailand
Phannee Rattanachisit, King Mongkut's University of Technology Thonburi, Thailand

The baking activity is a science teaching enhancement course that is focused around using food to engage students in many topics in chemistry. The purposes of this study are to develop ways of integrating science knowledge and skills by using hands-on activities and to find out the effectiveness of a baking activity for teaching of concepts of the biomolecule and chemical reactions. The results showed that the scores for the posttests which are statistically significant difference of the control group (CG) (M=6.98, SD=0.84) and experiment group (EG) (M=8.67, SD=1.60). In pretest and posttest students were also asked to self-assess their knowledge by answering the following questions with "I am sure" and "I do not know". The number of students in the CG that assessed "I am sure" stayed about the same with a decrease in the answer "I do not know" at both answers "Right" from 41.46% on the pretest to 17.31% on the posttest and from 2.69 % on the pretest to 0.45% on the posttest, respectively. In contrast with the EG students, there was substantial improvement. Especially, "I am sure", encouraging is to increase in the number of right answers and decrease in the number of wrong answers. In the same way, "I do not know" results showed that the right answer increased after they learned with a baking activity. The results show that a baking activity can enhance students' understanding about conceptual knowledge and encourage students to realize the link between food and chemistry.

53413   09:25-09:50 | Room 608 (6F)
Followership in Mongolian Higher Education
Laurel Lee, Soka University of America, United States

Leadership is a fluid process which is not contained within a person or position, which results in the study of followership being equally important in creating positive changes in our society (Barnes & Kriger, 1988; See, 1986). As the aim of higher education is to cultivate leaders who are the next generation of global leaders, it is important to examine the sense of followership of professors who are the role models for the future changemakers. Followership is defined as a social construct where both leaders and followers co-construct the relationship (Fairhurst & Grant, 2010). The research objective of this study is to examine the potential of followership of professors in higher education in Mongolia. This leads to the research question, "How do professors as followers contribute within the academic setting?" Kelley's Follower Typology(Kelley, 1988) and Cultural Values and Followership Framework(Can and Aktas, 2012) is used in analyzing the follower styles of professors as it places great emphasis on the motivations and behaviors of followers. Surveys and interviews were examined through the lens of culture and gender. The preliminary findings found that followership is a multi-dimensional concept with deep influences which stems from their individual identities. This study will allow educators to further understand leadership through the lens of followership in higher education. By understanding the fluidity of followership and leadership in educators within collegial setting, it will allow for a more wholesome understanding of the cultivation of emergence of leadership within each individual in the university setting.

53381   09:50-10:15 | Room 608 (6F)
Experiment Whose Education? – Exploring Experimental Education Students' Learning Process and Reflection on Current Education in Taiwan
Joying Chu, National Tsing Hua University, Taiwan
Tzu-ying Su, Tsing Hua College of National Tsing Hua University, Taiwan

The research aims to explore the learning process and reflection on current education by the first experimental education students in National Tsing Hua University, which is currently the only university implementing the experimental education project in Taiwan in 2018. The research method is document analysis and in-depth interview. The students' application documents are analyzed, and then from the perspective of students, parents, school teachers and external school teachers, explore the essence of experimental education from different perspectives, how it helps them and the difficulties in the formal education. From the research results, no matter the students, parents, teachers, the nature of experimental education is different, students and teachers can support and communicate with each other, but most teachers still do not understand. In the course planning, students can use the graduation themes as anchors to plan their own university study maps. Atypical courses are adaptable and diversified. However, there are some students whose goals are uncertain due to the volatility of the experiment, and the content is still insufficient. Secondly, this study examines the embryonic form of experimental education in higher education from multiple perspectives. It is not only to open new cultivation of talent model for students to design independently but at the same time, students also stimulate another student's learning mode in the field of compromise and struggle.

09:00-10:15 | Room 609 (6F)
Saturday Session I
Religion in Education
Session Chair: Hugh Schuckman

54566   09:00-9:25 | Room 609 (6F)
Integrating Reflections on Scriptural Text in Language Classes: The Southern Philippines and Bangkok Experience

Maribeth Cabrejas, Lourdes College, Philippines
Jan Rey Cabrejas, Assumption College of Thonburi, Thailand

Scriptural Text Integration employed in some Catholic educational institutions throughout the world has become the core pedagogy that promises relevant and meaningful education for today's learner. This study investigated the experiences of the teachers and students in integrating Scriptural texts in language classes. It utilized a transcendental phenomenological research design. The study involved ten students and ten teachers in both Catholic schools in Southern Philippines and in Bangkok, Thailand. Focus Group Discussion and interviews were employed. Findings reveal that teachers used strategies such as careful choice of Scriptural texts; using Scriptural texts to broaden the topic; connecting Scriptures to life experiences; and use of Scriptural text as a platform for values formation. In terms of challenges, they expressed difficulty in having ample time for meaningful integration; Lack of skill in integrating Scriptural text; passivity of some students; and difficulty in word choice considering Thai students' spiritual background. In terms of effects on teachers, they have improved teaching effectiveness; empowered in shaping students' values; In-depth understanding of the lesson; self-fulfillment; and improved devotion to God. For students, this enabled them to gain deeper understanding of the lesson; evaluate their actions; make them more reflective; build closer relationship to God; and learn to share. From the findings, it can be inferred that such integration enabled teachers to experience a deep sense of fulfilment. Students too, developed the skill of discernment in their actions. Thus, it is recommended that teachers be trained and encouraged to continually integrate scriptures in their instructional processes.

54338   09:25-9:50 | Room 609 (6F)
The Role of the Muslim Students' Association in Preserving Indonesia's Unity in Diversity

Darda Abdullah Sjam, Indonesia University of Education, Indonesia

Students' organizations play very important roles in delivering the knowledge, the impression, and the spirit of Indonesian nationalism under the umbrella of Bhinneka Tunggal Ika (Unity in Diversity). One of the challenges currently faced by Indonesian students' organizations is their capabilities, or lack thereof, to protect their noble intentions from the interests of certain parties that take advantage of the students' activities and lead them towards something that in fact hurts the motto. In this context, the selection and orientation process is important in creating and strengthening the spirit of nationalism. Moreover, the emergence of religious students' organization contributes their own characteristics that are interesting to be studied further. Therefore, this research looks closer at how the concept of selection and orientation process in religious students' organizations, especially Islam Students' Association. In this article, the researcher sees that the selection and orientation process in religious students' organizations, such as Islam Students' Association have its own uniqueness and strength. It can be observed from the big number of members of Islam Students' Association who work in government offices, non-governmental organizations, private sectors, and other types of employment. They welcome differences and subscribe to the ideology of unity and what it entails, such as pluralism, democracy, as well as state administration and law enforcement. The three championed programs are the determinant factors in preserving Indonesia that unites in its diversity.

53782   09:50-10:15 | Room 609 (6F)
Together Action: Inter-Dependent Models of Education in Korean Buddhist Monasteries

Hugh Schuckman, University of Utah, Asia Campus, South Korea

Whereas the Seon (Zen) Korean Buddhist project of personal awakening is a singularly independent, individual experience, the Korean monastic tradition and in turn Korean Buddhist education emphasizes the importance of "together action," a catch-phrase for the important lessons learned in community. This presentation will focus on a case study of the Korean Buddhist Monastery Musangsa, which both continues and builds upon the Korean monastic tradition of practicing Buddhist teachings in a communal setting. The founder of this monastery and the Kwan Um school of Buddhism, Seung Sahn Sunim, likened the monks, nuns, and laypeople living in community to potatoes in a spinner, each one colliding into the other, slowly removing the rough outer skin and smoothing over the rough edges. Through archival research of dharma talks by prominent monks and nuns in the Kwan Um order as well as semi-structured interviews, this research presentation will highlight both the lessons and the importance of "together practice" in maintaining and promoting the core lessons of Seon Buddhism.

Saturday Session I
Environmental Education & Natural Disasters in the Classroom
Session Chair: David Humphreys

53000 09:00-09:25 | Room 703 (7F)
Creativity, Communication Skills, and Habits of Mind through Mathematical Modeling of Natural Disasters toward Successful Production of Models
Garry Cachuela, West Visayas State University, Philippines
Elvira Arellano, West Visayas State University, Philippines

Mathematical modeling (MM) is considered as one of the many skills and processes in order to attain the twin goal of the K to 12 Mathematics curriculum in the Philippines. While the necessary skills in doing MM have been identified in many developed countries, there is still a dearth of literature and empirical data in different Filipino communities. In response to this need, the mixed-method study aimed to determine the production skills needed by students to successfully come up with a mathematical model on natural disasters. The validated and reliability-tested researcher-made test and rubrics on Mathematical Creativity, Communication, and Habits of Mind (HoM) were used to measure students' mathematical creativity, communication skills, and HoM. In-depth interviews, focus group discussions, journals, observation guide, and MM outputs were used to gather qualitative data. The results revealed that students have increased their level of mathematical creativity, communication skills, and HoM after being exposed to MM. Also, a significant relationship existed among students' level of mathematical creativity, HoM, and communication skills after they were being exposed to MM. In an MM activity, three important themes of productions skills are necessary for the students to successfully produce a mathematical model, namely mathematical creativity, mathematical HoM, and mathematical communication. Propositions for the emerging grounded theory framework with conditions set by this present investigation were also discussed. Hence, the teaching and learning of mathematics must give emphasis on integrating MM in the mathematics curriculum and its significance to students' production skills development, and 21st century lifelong learning.

53777 09:25-09:50 | Room 703 (7F)
Integration of Disaster Risk Reduction in the School Curricula in Promoting Capacity Building and Raising Awareness
Gian Carla Rico, Saint Jude Catholic School Manila, Philippines

The integration of Disaster Risk Reduction (DRR) into the school curricula is strengthened by the implementation of DRRM Act in the Philippines. One of the provisions highlighted in the law is the integration of DRR into the school curricula. Raising awareness and capacity building are some of the proactive approaches which could be utilized that will allow participation of different stakeholders. This study analyzed how disaster risk reduction is integrated into the school curricula in the Philippines. Through analyzing the curricula from the basic to the tertiary levels and the responses of the participants in this study who are primarily students and teachers in Manila, the results highlighted the importance of learning disaster risk reduction at school particularly when done with activities familiar to learners. Awareness is raised through knowledge dissemination, simulation activities and consistent campaigns in promoting the capacity of individuals to reduce the risks of disasters. Learners from the higher levels manifest their capacity as potential aids through their knowledge of basic first aid and life support. Most of the respondents take active participation in DRR practices. However, some challenges and gaps were also identified as some teachers lack sufficient number of and relevant trainings that will update their knowledge on disaster risk reduction and equip them with the relevant skills which they can pass on to the learners. The curriculum design and the practices, at some extent, do not complement in consideration of available resources, teacher's knowledge and skills, and time element.

52447 09:50-10:15 | Room 703 (7F)
Ecopedagogy or Environmental Education?: The Role of Educators in Addressing Climate Change
David Humphreys, The Open University, United Kingdom

Climate change and the degradation of the biosphere represents the greatest public welfare challenge of the twenty-first century. It calls for a public education endeavour involving not just the academy and students but the global public. Ecopedagogy offers the prospect of a new curriculum, a radical approach to education that resists those political and economic structures that generate environmental problems while working with social movements to generate an alternative politics. It challenges those engaged in environmental education to rethink how they teach agency to students and what the role of the educator should be in teaching citizens to consider how they should respond to environmental degradation. This paper explores the relevance of the concept of ecopedagogy as a teaching model. It presents some examples of teaching on agency and environmental issues from Open University environment modules that encourage students to critically assess their role in responding to global environmental degradation. The paper also considers the development of a live synchronous negotiation to teach international environmental negotiations, and a climate model to teach students how scientists make predictions on future anthropogenic climate change.

09:00-10:15 | Room 704 (7F)
Saturday Session I
Art & Music in Education
Session Chair: Borim Kim

52489   09:00-09:25 | Room 704 (7F)
An Indigenous Epistemological Revival through Visual Art
Nombeko Mpako, University of South Africa, South Africa

The paper will reflect on an art practice teaching methodology that encourages students to embrace their indigenous knowledge and cultural meanings as a point of departure, culminating into visual narratives. The method inculcates re-claiming of the almost forgotten African thought and literature through understanding the formation of indigenous epistemological ideals. Since the advent of colonial epistemic discourses in higher education the inclusion of Indigenous knowledge has been positioned mainly for social justice rather than being the subject by which holistic African epistemologies can be pursued. Given that creative arts are by nature intersecting and parallel with other communicative languages and literature this re-claiming of indigenous epistemic perspective can give way to continuing inter-trans-disciplinary dialogues pertinent to meaningful academic discourses. The paper provides an overview of a selection of Xhosa language speech acts, analysis and interpretation of the visual narratives resulting from this methodology. It further gives details of how Xhosa cultural meanings are constructed through common language that subsequently influence the behavioral world of the speakers. The whole process becomes cathartic for the students-artists-researchers. This is because it begins with the artists-researcher feeling transcendent and unleashed in their creative processes culminating into artworks that are meaningfully evocative not only for the artist, but also to the viewers. Consequently, the emergent visual narratives become subjects for the sustainability of the indigenous culture and in particular the language, as well as being the objects for further research.

53389   09:25-09:50 | Room 704 (7F)
Research on Theory and Practice of Art Characteristics Development in Junior High School
Min Hui Tsai, National Changhua University of Education, Taiwan

The purpose of this study is to explore the status of the implementation of the theory of the development of artistic identity in the case junior high school, as well as to understand the situation and characteristics of the visual arts teachers in the case junior high school, the teaching strategies and the professional growth process. This paper adopts the art-based research, through observation and questionnaires, to understand the case of junior high school visual art curriculum design and teachers' teaching strategies. It is hoped that through the description and analysis of the case and teaching, new ideas can be provided to art educators. The conclusions obtained by this study are as follow: 1. Understand the theory of the development of artistic characteristics and apply it to the curriculum design of the junior high school. The visual arts teachers in junior high school can better understand the status of students and the process of learning art. 2. Through the application of the theory of artistic characteristics development in the process of designing the visual arts curriculum in the junior high school, we can understand the artistic development characteristics of students at this stage, so that students can learn the methods of artistic thinking and problem-solving in line with their development. 3. The junior high school visual arts teachers guide the teaching with the theory of art development, supplemented by exhibition activities, life science and technology, and information technology to assist students in learning.

52343   09:50-10:15 | Room 704 (7F)
Korean Wave and Educational Change: What Effect did BTS have on Korean Education?
Borim Kim, Chungbuk National University, South Korea

The entertainer of the Joseon Dynasty was the occupation that be treated as a the lowest people. However, entering the modern society, entertainers became the most desirable occupation among students in Korean society. Students enter a famous entertainment company at a young age, and after a hard training, people who have gone through the process become popular celebrities. It is trained. BTS is also a singer group who has gone through these training methods, but their approach to the public is to encourage them as entertainers rather than to entertain the public as an entertainer, such as sharing a small daily life through SNS, communicating a positive message such as 'Love yourself' to the youth, It was different from other entertainers in that it had a message to say. It is necessary to review the positive and negative influences brought by the Korean Wave to Korean education. On the positive side, students' dreams are expanding in place of their dreams of having to go to a high-name value university where they can study because they have pride in Korean culture and culture can become global contents. Recently, however, daily lives that are hidden in colorful lives such as entertainer drug cases are revealed and the moral education is emphasized more.

Saturday Session I

Early Childhood Education: Technology

Session Chair: Ching-Min Chang

54553   09:00-09:25 | Room 705 (7F)
Design of a Digital Application to Aid Hindi Alphabet Recognition/Formation for Children With Learning Disability
Abhishek Bose, Gojek, India
Jyotsana, Indian Institute of Technology, Kanpur, India

Dyslexia is the most common learning disability that majorly affects language development and reading. In India, dyslexic children despite being moderately intelligent and good with English alphabetic knowledge perform poorly in Hindi. These children find it very difficult to recognize and remember the shapes of the Hindi alphabets because of its complex features such as the curves, matras (dependent-forms), halants (half-form), etc. The importance of learning Hindi cannot be ignored especially in India where all the major day to day activities are carried out in the Hindi language. After knowing the problem, the authors revisit the Hindi Alphabets (Varnmala) and tries to find out how the complex features of the Hindi alphabets can be taught efficiently. The data and insights were gathered through observation sessions, video recordings and behavioral studies of 5 dyslexic children aged 8-12 years. Open-ended interviews with teachers and parents helped to understand the problem better. A deeper analysis of the Hindi language led the authors to reconstruct all the 48 alphabets of the script (36 Consonants and 12 Vowels) using combinations of just 10 basic shapes. Findings from these sessions helped authors to design and develop an interactive touch-based digital application that helps these children to recognize and form Hindi alphabets efficiently and also provides audio-visual feedback to the children which makes learning fun. Testing the application with 12 dyslexic children revealed that the average time to learn a new Hindi alphabet got reduced from 2-3 weeks to one week.

53356   09:25-09:50 | Room 705 (7F)
Outdoorbuddy: A Wearable Device for Nature Exploration for Children
Rahma Ahmed Ali Nasser Alrashdi, Keio University, Japan

The use of advanced indoor technology increased recently and kids become more addicted to it, disconnecting them from interacting with nature. This research aims at reconnecting kids with nature and encourage them to explore and increase their curiosity. Fieldwork was conducted to understand kids' interaction with nature: 1) While using explorers toolkit. 2) While using smartphones to assist them. The fieldwork's outcome showed that kids are curious about nature but they are facing some issues: a) They don't have a gadget to record their observations. b) They like to explore without holding tools nor documents. c) It is hard for them to refer to what they have explored earlier. d) They have unanswered questions and adults around them are either busy or unable to answer. e) Most importantly, they are unaware of what they do not know about the explored object (Information Gap). Kids should experience the surrounding environment through discoveries based on their interests or preferences,leading to the OutDoorBuddy project. OutDoorBuddy is a wearable device that helps kids with an interest in nature, detect new objects using deep learning object detection feature which automatically gives them questions/ comments about object of interest. OutDoorBuddy raise kids' awareness of their information gap while exploring. Kids can interact with the OutDoorBuddy by inputting questions as well. OutDoorBuddy is not providing full answers, as the main goal is to trigger kids curiosity. Furthermore, OutDoorBuddy is connected to a smartphone App on which kids can save their findings and create their own encyclopedia.

54500   09:50-10:15 | Room 705 (7F)
The Performance of Spatial Ability of 5 to 7 Years Old Schoolchildren Utilizing Computerized Immediate Feedback Assessment Technique (IFAT)
Ching-Min Chang, Chung Chou University of Science and Technology, Taiwan
Shu-Chu Yang, National Chiayi University, Taiwan

The purpose of this study was to analyze utilizing Computerized Immediate Feedback Assessment Technique (IFAT) in Spatial Ability Test in 5 to 7 Years Old schoolchildren in Taiwan. The quantitative analysis and qualitative interviews of structural equations multi-group analysis were used as the research method in this study. The subjects of this study were 5-7 years old children, including 134 boys and 124 girls. The results showed that the computerized IFAT spatial ability test had good reliability and validity. The spatial ability performance of boys was statistically significantly better than girls. The computerized IFAT provided 5 to7 years old school children learning motivation interest. The response of the acceptance of both boys and girls using computerized IFAT was respectable. Most of the children accepted the IFAT test style because it allowed children to answer the questions until they get the correct answer (Answer-Until- Correct). This helped them reduce the anxiety from failing the questions.

09:00-10:15 | Room 707 (7F)
Saturday Session I
Learning Experiences: Biology
Session Chair: Sally Dadea

52929   09:00-9:25 | Room 707 (7F)
Exploring the Use of Project-based Learning in Grade 10 Biology 1
Gina Basmayor, Bicol University, Philippines

The diversity of learners created a challenge in science education in terms of its strategies and styles. One learning strategy that is gaining spotlight today is the Project- Based Learning which has its root on constructivism. It has increasingly been trialed and adopted across a diversity of educational institutions worldwide. The intent of this study is to explore the use of this learning strategy that may help educators to be more knowledgeable in implementing it inside the classroom. It aimed to develop lessons with the features such as alignment to K-12 learning competencies, active learning, contextualization, cooperative learning and use of higher-order thinking skills. Also, the processes and products developed by the students were presented. Quanti-Qualitative method was used in analyzing the data- qualitative was used in determining the process and product developed by students and students' response on the journal entries and focus group discussion and the quantitative was done through pre-experimental design – one group pretest-posttest. Five features were fused in the lessons developed using Project-Based Learning for Grade 10 Biology which were implemented to a group of Grade 10 student of San Lorenzo National High School, Philippines to determine the processes and products that the students developed and the competencies manifested by students in terms of knowledge, process skills and attitudes and values. Results revealed that there is an increase on the performance level of the students after being exposed to Project-Based Learning. Also, the students manifested process skills and positive attitudes towards Biology.

52407   09:25-9:50 | Room 707 (7F)
Instructional Message Design-guided Biology Teaching: Effects on Students' Creativity and Cognitive Resource Expenditure
Tristan Orbeta, University of the Philippines, Philippines
Rosanelia Yangco, University of the Philippines, Philippines

The main thrust of the study was to examine the effects of Instructional Message Design-guided Biology Teaching on students' creativity and cognitive resource expenditure (CRE). It utilized the quasi-experimental approach adopting the repeated measures, factorial design. A total of sixty-one Grade 11 senior high school students from two comparable intact sections were involved in the study. The Torrance Tests of Creative Thinking (TTCT) were administered as pretest and posttest to assess students' creativity. The Cognitive Resource Expenditure Scale (CRES) was given after each session within the duration of the intervention to measure CRE. A one-way ANCOVA showed that IMD-guided Biology Teaching was effective in enhancing students' creativity while a mixed between-within ANOVA indicated that the intervention was effective in lowering CRE. Pearson's correlation analysis confirmed a negative relationship between creativity and CRE. Qualitative data were also gathered to support the results derived from statistical tests. Based on the findings, it is imperative that educators apply the IMD principles when planning and carrying out instruction, primarily considering the cognitive ability and processing of learners.

52930   09:50-10:15 | Room 707 (7F)
Lessons in Grade 10 Biology Using Cooperative and Guided-inquiry Approach
Sally Dadea, Bicol University Graduate School, Philippines

This descriptive developmental research study determined the effect of the developed lessons in Biology using Cooperative and Guided Inquiry Approach for Grade 10 students of Barangay High School in Manito Albay. Specifically, it sought answers to the questions: (1) What lessons may be developed for Grade 10 Biology with the features: cooperative learning, guided inquiry learning and use of authentic assessment; (2) What is the effect of the developed lessons in enhancing student's conceptual understanding and attitude towards Biology; and (3) What are the significant experiences of the students during the implementation of the developed lessons? The researcher employed pre-experimental research design and utilized qualitative and quantitative techniques in the analysis of data. Quantitative data were gathered through the use of the pre-test post-test results on conceptual understanding and attitude survey responses of the students. While qualitative data were gathered from the students written outputs, students journals and focus group discussion (FGD). The results showed a significant increase in the pretest and post test of the respondents conceptual understanding and overall positive attitude towards Biology after using the 8 developed lessons. The 8 developed lessons helped the students with the topics initially perceived as difficult evident in the positive mean gain scores of the respondents pre and post test results. Using the cooperative and guided inquiry approach in teaching, the students learned to value team work; developed their leadership skills; and helped them to manage their time smartly. They also learned the art and significance of cooperation, patience, responsibility and cooperation.

10:30-12:10 | Room 601 (6F)
Saturday Session II
High School Education
Session Chair: Josephine Dumrique

53622   10:30-10:55 | Room 601 (6F)
Curriculum Metamorphosis: Lived Experience of Senior High School Students of Letran Calamba Under K to 12
Glenda Petrasanta-Lizardo, Colegio de San Juan de Letran Calamba, Philippines

The study focused on the lived experience of senior high school students of Colegio de San Juan de Letran Calamba from S.Y. 2016 to 2018. The objectives of the study were 1) to identify the lived experience in terms of demands and challenges from the perspective of selected senior high school students; and 2) to analyze how they cope with the demands and challenges that contribute to their lived experience. Focus group discussion among the eight participants from the different strands, bracketing, horizonalization, thematic analysis, and interpretative phenomenological analysis were employed during the conduct of the study. Results revealed that senior high school students of the Colegio treated K to 12 as an avenue for training and preparation that allowed them to think deliberately before entering college and helped them discover their potentials and capabilities for future endeavors. However, some of the participants look at K to 12 as demanding and challenging in terms of expenses and pressures from choosing the right strand. Nonetheless, they also feel fortunate with the help of R.A. 7722 which allows students to choose any course regardless of the strand taken in Senior High School. The problems pointed out were teachers' deficiencies and paralleled expertise, overwhelming performance tasks and the multiple deadlines which contributed to their academic stress and learning process. It was noted that teamwork played a major role during their stay in the Colegio. Overall, the participants call to revisit and further improve the curriculum for the next generation.

53360   10:55-11:20 | Room 601 (6F)
Beliefs and Practices in the Implementation of Performance Tasks (PETAs): Basis for the Development of Enhancement Program
Shiela Marie Masaoay, Far Eastern University, Philippines
Rodrigo Litao, University of Santo Tomas, Philippines

One of the components of the summative assessment for senior high school students as stated in DO No.8, s. 2015 is the Performance Tasks (PETAs), which allow learners to demonstrate what they have learned in diverse ways. Using Constructivist Learning Theory and Zone of Proximal Development and explanatory sequential mixed methods design, this study mainly aimed to ascertain the relationship of the respondents' profile with their beliefs and practices in the implementation of PETAs. It likewise explored their insights regarding their experiences in the use of the said assessment. Respondents included 300 senior high school teachers. Using self-made questionnaires that underwent validity and reliability tests, and statistical treatments results indicated no significant difference in the beliefs and practices of the respondents according to their profile and a significant positive correlation between age and to their beliefs and practices. There is also a significant positive correlation between years of teaching and to their beliefs. However, there is no significant positive correlation between years of service to their practices. Results likewise showed that the respondents' difficulties in implementing PETAs included too many class interruptions due to meetings, compliance with reports, and trainings. Using constant comparative method and induction to theme development, the semi-structured interviews, revealed three recurring themes -- PETAs as real-life application of learning, PETAs as being difficult to assess, and PETAs as causing difficulty in time management. Implications of the findings, including the need for enhancement program on the proper implementation and management of PETAs, are put forward.

51970   11:20-11:45 | Room 601 (6F)
Developing an Administration Model for Effective Governance of Standalone Senior High Schools
Mildred Jimenez, University of the East, Manila, Philippines

In any organization, change is always constant and inevitable. Whether one is ready to accept it or not, it needs to be given proper attention. In the Philippines, a major change in different sectors transpired after the government's adoption and implementation of the K to 12 Program in 2012. Stakeholders in the education sector needed to adjust to the total overhaul that it brought about to the system. Interestingly, it is clearly evident that many of the SHS Principals are still on the process of understanding and mastering their new roles in a relatively new position, whether they have an experience of being school heads in Junior High School or not. This study seeks to identify the challenges which Standalone SHS Principals face. Then it will try to determine how those challenges are addressed so that an effective administration model can be developed for Standalone SHS. A mixed method approach will be employed using a quali-quanti design where out of twenty-nine Standalone SHS Principals in NCR, seven will be initially interviewed. The responses from the interview will be utilized to construct a questionnaire which will then be answered by the remaining twenty-two principals to validate the findings in the qualitative phase. Also, the perception of teachers, parents, students, local government units, and the industry regarding the results of the interview will also be gathered. It is with hope that the results of this study will be helpful for Standalone SHS Principals in addressing whatever issues they may be facing.

53806   11:45-12:10 | Room 601 (6F)
Challenges and Opportunities of the Senior High School Program in the Philippines
Josephine Dumrique, Department of Education, Philippines

The Philippines implemented in 2016 the Senior High School curriculum with the aim to better prepare students to pursue higher education through its academic track or equip them with skill sets under the livelihood-vocational track or to hone their artistic talents under the arts and designs tracts. Within its three years of implementation, however, discussions still continue whether it is really achieving its purpose or it is simply an additional financial burden to parents of senior high school students and additional years of study on the part of the students. Adding to the issues is the readiness of facilities and effectiveness of teachers in the Senior High School with many of them coming from the tertiary level where their years of teaching were more for college students whose learning adaptation and abilities are far different from high school students. Central to this study is the implementation of the Senior High School Program in the Philippines by looking closely to the experience of the Schools Division of Tarlac Province and identification of the strengths, weaknesses, opportunities and threats by school heads that can positively contribute to the improvement of the program as a whole, among others.

10:30-12:10 | Room 603 (6F)
Saturday Session II
Professional Training - Communities of Learning
Session Chair: Arianne Rourke

53966   10:30-10:55 | Room 603 (6F)
Developing School-based Gifted Curriculum Through Professional Learning Community: A Case Study of a Junior High School in Taipei
Chiao-Wen Wu, National Taiwan Normal University, Taiwan

It is increasingly acknowledged by researchers across the world that professional learning community is a good means of school improvement. The Taiwanese ministry of education and local authorities have been promoting the idea and practices among various levels of schooling since the mid-2000s. Both school-based and cross-school professional learning communities are in practice in the Taiwanese context. This study aims at offering a case study of a school-based professional learning community with 5 members in a junior high school in Taipei. Initiated and facilitated by the researcher, this professional learning community focuses on developing a school-based English Talent program for language gifted students. Taking the action research approach, all teachers have to implement this school-based curriculum. Members of this professional learning community are going to observe each other's lesson and then discuss how the teacher teach and how the students learn. With the findings from action research, this school-based curriculum will be revised to offer better learning for future gifted students. Data are collected from mid-2017 onwards. The experience of this professional learning community can offer an interesting case to the international audience regarding the development of a professional learning community in the Taiwanese context. The Taiwanese case might serve as a start for future international comparative study.

53448   10:55-11:20 | Room 603 (6F)
Empowering Teachers in the Philippines through Learning Action Cells
Xerxes de Castro, Assessment, Curriculum and Technology Research Centre, Philippines
Marie Therese Angeline Bustos, Assessment, Curriculum and Technology Research Centre, Philippines

In the Philippines, trainings from the national to regional, division, district, and school levels are usually delivered in top-down or cascade processes. Recognizing the need for more cost-effective and continuous professional development opportunities for teachers, the conduct of school-based Learning Action Cells (LACs) was institutionalized in the Department of Education in 2016. It serves as a learning community of and for teachers to help improve their practice. In 2014, the Assessment Curriculum and Technology Research Centre (ACTRC) served as a verification agent for the World Bank-funded Learning, Equity and Accountability Program Support (LEAPS) Project. It tracked the training of school heads and Grades 1 to 3 teachers on Early Language, Literacy and Numeracy (ELLN) in five regions between 2015-2018. Teachers expressed an overall appreciation of the ELLN program delivered through LAC. Because it operated in a safe and familiar environment for teachers, they were able to freely communicate problems in their school that required immediate solutions, identify specific teaching difficulties, develop and prioritize interventions to address recognized issues, exchange and brainstorm ideas together, and plan all other activities that would support math and literacy instruction. LAC allowed schools to function independently in solving their urgent concerns and developing expertise within their pool. The interdependence that teachers had formed among each other nurtured their skills and fostered mutual support. Through the LAC, teaching practices and student learning improved upon application of newly acquired strategies in the classroom.

53313   11:20-11:45 | Room 603 (6F)
Establishing a Community of Practice in a Preservice Mathematics Organization
Stephen Raymund Jinon, West Visayas State University, Philippines

This Participatory Action Research helped in addressing the gaps of preservice teachers by establishing a Community of Practice (CoP) in a preservice mathematics education organization, that mirrors the CoP of professional teachers' organization in some mathematics organization in the Philippines. The elements of CoP, social learning theory, and the negotiated-order theory guided the researchers on their established practices. Qualitative evidences were gathered from a purposively chosen co-participants of the study to ascertain how these preservice teachers collaboratly develop practices to move forward from status quo. The preservice teacher's encountered gaps on their pedagogical practices as well as on some aspects of their domain and community. They worked together in addressing these gaps by establishing the community called Circle of Mathematicians-Teacher of Progress (COM-TOP) and their practices called LDCIT (Lesson Planning, Demonstration Teaching, Classroom management, Instructional Materials, and Trends on research). The SET (Sense-Enforce-Transmit) cycle helped them in achieving their goals. As they continuously established their identity and improve their processes, their practices had improved, and the transmission of ideas became more systematic. This study showed that an organization can be a community of practice that could help preservice mathematics teachers prepare for the challenges of teaching profession through collaboration. This will further prepare them in the challenges of the new K-12 mathematics curriculum. This will not only apply to the preservice mathematics teachers but also to those group of preservice teachers who have higher hopes of improving the quality of education in the Philippines.

52330   11:45-12:10 | Room 603 (6F)
Forming Ecologies of Practice: How a Distributed Facilitator Framework (DFF) Scaffolds Teacher and Student Partnerships in Career Development Learning (CDL)
Arianne Rourke, University of New South Wales, Australia
Kim Snepvangers, University of New South Wales, Australia

This paper discusses a project where students and educators worked iteratively in collaborative reciprocal relationships to enhance International student experiences in higher education. Here disciplinary knowledge and appropriate pedagogies are inextricably linked, emergent and meaningful, demonstrated through carefully articulated creative encounters. The Teaching International Student (TIS) Project was planned within in a Distributed Facilitator Framework (DFF) that encompasses activities, events, resources, 'Student as partners' projects and a growing independent Community of Practice (CoP). The theories that underpin the DFF model, includes the Iceberg Model of surface and deep culture (Kruger, 2013) and the 'Ecologies of Practice' concepts of Kemmis and Heikkinen (2011) and Snepvangers & Rourke (2017). The DFF was created to visually capture an interconnected series of processes and events that utilised the Kemmis et al's (2011) characteristics of 'sayings, doings and relatings'. An Action Practitioner Research methodology was developed over a one-year cycle that includes follow-up reflective practice activities. The project has been evaluated utilising high-level positive educator-led evidence that does not rely on one-off surveys and instead explores other ways of longitudinally capturing qualitative data that takes into account the iterative nature of learning and teaching. Evidence of shifts in practice through pre and post reflection survey data within and outside each activity and event is a key focus of the evaluative process. The outcome demonstrates ways of capturing and disseminating holistically new Career Development Learning (CDL) in professional educator practice through showcasing, evaluating and the adaption of good practice in a variety of disciplinary contexts.

10:30-12:10 | Room 604 (6F)
Saturday Session II
Language & Cultural Identity
Session Chair: Kuanysh Tastanbekova

54109   10:30-10:55 | Room 604 (6F)
Derivation of Reduplication, Iteration and Repetition in Filipino
Nina Lilia Javier, Bulacan State University, Philippines

This paper features the derivational nature of reduplication, iteration, and repetition of morphemes in Filipino. This study will also cover the derivation of morphologies of Filipino language that aims to be applied in teaching practices. Derivation plays a productive role in the Filipino language particularly in the formation of new words and meanings from an existing word. With the use of derivation, the modification of a certain word results not only to the formation of new meaning but also creates an alteration to the lexical category. This is a qualitative research on derivation of Filipino. The data for the analysis were adopted from written and oral corpus in usual conversations in media such as commercials and news. This study sheds light to the following topics: (1) reduplication or repeated first syllable, (2) iteration or repeated first two syllables and (3) repetition or repeated the entire morphemes. Reduplication, iteration and repetition are divided according to its lexical category of its morphemes. These are: (a) morphological derivation, when the lexical categories of words are changed (b) semantic derivation, where in its lexical categories did not change but the meaning had changed.

54458   10:55-11:20 | Room 604 (6F)
The Relationship Between Chinese Language Learners' Cultural Identity and Their Study of Chinese as a Foreign Language
Ji Yitian, Jiangsu Second Normal University, China

Over the two decades, learning Chinese as a foreign language has become more and more popular all over the world. A mounting number of countries have set up Chinese language courses and an increasing number of overseas students have come to China to learn Chinese as well. Inevitably, students are exposed to Chinese culture in the process of learning Chinese. This literature review therefore synthesizes research that has empirically examined factors related to the relationship between cultural identity and learning Chinese as a foreign language. Their relationship is discussed with reference to three main themes: (a) whether language learning enhances cultural identity; (b) whether cultural identity motivates language learning; and (c) whether language learning and cultural identity are intertwined and increase or decrease together. The findings suggest that learning Chinese as a foreign language has positive effect on learners' identity of Chinese culture, and in turn, the more learners integrate into Chinese culture, the higher level proficiency of Chinese they obtain. Overall, learning Chinese and learners' identity of Chinese culture are mutually promoted. However, future research is needed to investigate learners who study Chinese at different age groups, and determine whether the relationship between the two concepts would alter.

54014   11:20-11:45 | Room 604 (6F)
The Benefits and Challenges of Intergenerational Minority Language Transmission Amongst Korean Migrant Families in New Zealand
Jean Kim, Sonoda Women's University, Japan

In line with current trends of globalisation people tend to migrate to a country other than their home country. Previous research suggests the importance of majority language acquisition as a key element to integrate into mainstream society. In contrast, former research shows that bi-/multilingual speakers bring social and economic benefits for mainstream society and being bi-/multilingual enhances sense of belonging to a majority society. Such contradictory messages may create dilemmas for migrant families in their minority language transmission across generations. A New Zealand study demonstrated that Korean migrant families reported 83% of intergenerational Korean language transmission when living in New Zealand (King & Cunningham, 2016). The present study aims to explore the benefits and challenges of being bilingual speakers of minority and majority languages when living in a monolingual-focused New Zealand. Interviews were conducted with 11 Korean migrant parents and 12 of their New Zealand-born children aged from 16 to early 20s in their experiences and feelings about language choices, practices and their consequences. Findings show that an ability to speak both minority and majority languages helps the children to develop a hyphenated identity; Korean-New Zealander, that facilitates social acceptance within both minority and majority society. Such acceptance leads to the power that comes from belonging. However, a lack of multilingual awareness amongst the majority society may hinder minority language transmission in migrant families.

53708   11:45-12:10 | Room 604 (6F)
Past, Present and Future of Multilingual Education Policy in Central Asia: is Mother Tongue Education still the right?
Kuanysh Tastanbekova, University of Tsukuba, Japan

In the age of intensifying competition for limited resources educating multilingual citizens has become one of the most important issues of language education policies around the world. However, pursuing political, social and economic stability within a given country requires governments to consider not only global challenges but national interests and local needs as well. Language education policy in five Central Asian states of Uzbekistan, Kazakhstan, Kyrgyz Republic, Tajikistan and Turkmenistan sparks scholarly interest as these countries represent extreme ethnic and linguistic diversity and share common Soviet past with its policy of "Russification" as one of the reasons for pushing the policy for acquisition of dominant ethnic language in the first decade after independence. Since then language education policy in all five republics is challenged by finding a balance between national language, Russian and English. Yet the presence of mother tongue education of non-dominant ethnic minorities remains rather rhetoric than practical. The purpose of this presentation is to examine the transformation of the basic principles for language education policy in five republics by applying the concepts of "procedural and distributive justice"(Hossain and Pratt, 2008). It examines language education policies with a focus on concepts of right to education in/of mother tongue, right to education in/of a dominant language, and right to education of foreign language in their historical retrospective, contemporary condition, and future perspectives. This research argues that right to mother tongue education deteriorated both procedurally and in the distribution in all five republics.

10:30-12:10 | Room 605 (6F)
Saturday Session II
School Leadership
Session Chair: Semuel Olayvar

53355   10:30-10:55 | Room 605 (6F)

The Role of Authentic Leadership and Teachers' Organizational Commitment on Organizational Citizenship Behavior in Higher Education

Ma. Celia Roncesvalles, University of Santo Tomas, Philippines
Amelita Gaerlan, University of Santo Tomas, Philippines

Nowadays, the success of schools relies predominantly on the leadership styles of school leaders and the teachers' behaviors toward work. Despite the evidence showing that authentic leadership can effectively operate in an increasingly complicated environment, limited studies have focused on their impact on educational organizations. The purpose of this research is to examine the significant effects of authentic leadership possessed by school leaders on teachers' organizational commitment and organizational citizenship behavior in higher education institutions. This study aims to construct a behavioral performance model that could guide school leaders to attract and retain competent faculty members and provides some insights on the importance of authentic leadership in an academic environment. This quantitative study employed multiple regression analysis to assess the relationship of the deans' authentic leadership on the organizational commitment and organizational citizenship behavior of the 150 college teacher respondents. The results of the study show that authentic leadership is significantly correlated with the organizational commitment and organizational citizenship behavior in educational organizations. The study found that the authentic leadership of the deans positively affects the teachers' organizational commitment and organizational citizenship behavior in higher education.

52965   10:55-11:20 | Room 605 (6F)

Principals' Task Effectiveness and Student Achievement: Perceptions of Principals, Deputy Principals and Lead Teachers

Waseema Fikuree, The University of Auckland, New Zealand
Frauke Meyer, The University of Auckland, New Zealand
Mohamed Alansari, The University of Auckland, New Zealand
Deidre Le Fevre, The University of Auckland, New Zealand

Although the relations between general educational leadership practices and student achievement have been well-researched, little is known about the specific relations between principals' effectiveness in specific tasks and student achievement. The purpose of this research was to explore principal task effectiveness, as perceived by principals themselves and their senior management teams (SMT). This study identifies specific sets of principal tasks and explores the associations between perceived principal task effectiveness in these task dimensions and student achievement. This study employed an exploratory quantitative design using surveys to collect principal and SMT ratings of principal task effectiveness. Principals and SMT were asked to complete the same survey regarding principal task effectiveness. Survey data and grades from the International General Certificate of Secondary Education (IGCSE) in Mathematics and English as a Second Language were collected from all of the 178 public secondary schools offering the IGCSE in the Maldives. An exploratory factor analysis (EFA) was used to explore principal task dimensions. Hierarchical regressions were used to examine the predictive ability of principal task effectiveness and certain principal characteristics on student achievement. The analysis revealed five leadership task dimensions: School Management, Instructional Management, Teacher Quality, External Relations and Program Development and Evaluation. The Teacher Quality dimension and principals' years of experience in the school positively predicted student achievement in English as a Second Language. This research highlights the importance of principal task effectiveness and its link to student outcomes. These findings have implications for principals' training and professional development.

52946   11:20-11:45 | Room 605 (6F)

Teacher Leadership: The Case of Two Schools in Pavlodar

Bakyt Amirova, Nazarbayev Intellectual School of Chemistry and Biology in Pavlodar, Kazakhstan

The qualitative study focuses on teacher leadership in the context of Pavlodar region. The teachers from rural and urban schools have been interviewed to share their perceptions on teacher leadership. The research identifies teachers' understanding of leadership, factors that contribute to and inhibit teacher leadership. The participants also provide suggestions on how leadership potential can be enhanced at the schools of the region. The data analysis reveals that overall teachers have similar views on what teacher leadership is. All the participants state that teacher leadership is connected with responsibility and dedication towards teaching and learning. The participants show agreement that all teachers are true leaders since teachers are the ones who form young minds, encourage them to think critically and help learners explore the world. The study participants have identified the factors that contribute to teacher leadership. Among internal factors teachers identify professional knowledge, personal qualities and motivation as those that enhance teacher leadership among school educators. External factors, such as a supportive school environment, professional development programs and collaboration with other colleagues also contribute to developing teacher leadership at the school site. The participants also point out the factors that inhibit teacher leadership in schools. Two dominating factors have been identified during the interviews: lack of time-management skills and lack of collaboration. The participants suggest their initiatives that might enhance teacher leadership skills: organizing effective leadership training centers and increase of professional collaboration between rural and urban schools.

54649   11:45-12:10 | Room 605 (6F)

The Influence of Principal's Transformational Leadership and Quality of School Learning Environment on Students' Academic Achievement

Semuel Olayvar, La Consolacion University Philippines, Philippines
Alvin Nuqui, La Consolacion University Philippines, Philippines

A productive learning environment must first be a place where students can feel safe, physically and emotionally, which a transformational leader manages. It must be a supportive community where kids—and teachers—of all backgrounds can focus on learning. The main concern of the study was to assess the influence of principals' transformational leadership and quality of school learning environment on students' academic achievement. This study made use of descriptive correlational method of research that utilized standard questionnaires as primary data gathering tools, substantiated by extensive documentary analysis. The respondents of the study were teachers and principals of public secondary schools. The results were processed using the Statistical Packages for Social Sciences (SPSS) and the data were presented using appropriate tables and texts. The results were analyzed and interpreted using statistical tests such regression analysis in determining the influence of principals' transformational leadership and quality of school learning environment on students' achievement in English, Math, and Science. Using the aforementioned procedures, the findings of the study revealed that school principals who are good transformational leaders are contributors of best possible leadership outputs that facilitate more students learning and academic achievement likewise would help teachers to become more productive in practicing their teaching professions as committed member of school organization. The very good quality of school learning environment can be a springboard to the achievement of 21st-century classroom experience. The secondary school teachers are effective in motivating the students to learn and imparting knowledge to early childhood learners. Principals' transformational leadership and the quality of school learning environment exert significant influence on the academic achievement of students in English, Math, and Science. Implications drawn from the findings of the study are good insights that may be used in further improving the quality academic achievement of students in public secondary schools.

10:30-12:10 | Room 607 (6F)
Saturday Session II
Developing Critical Thinking Skills
Session Chair: Nadine Ouellet

52928   10:30-10:55 | Room 607 (6F)
Level of Content Knowledge and Critical Thinking Skills of Senior High School STEM Students in Disaster Readiness and Risk Reduction
Jeannie Rose Hilotin, Bicol University Graduate School, Philippines

Disasters are sudden disruptive events which affect the functioning of a community in utilizing its own resources. This makes disaster readiness and risk reduction a current trend in science teaching to match the needs to the fast-paced advancements which will provide many social benefits. This descriptive research study determined the level of content knowledge and critical thinking skills of Senior High School STEM students in Disaster Readiness and Risk Reduction (DRRR), their notable experiences, values and attitudes developed among the schools in Albay, Philippines based from their political subdivisions and topographical locations. It was concluded that the level of content knowledge of the students in DRRR before the lessons were in low mastery level while urban lowland schools were in near mastery level. For the level of critical thinking skills, all schools were in low mastery level. Students developed a sense of awareness with regards to the DRRR concepts which could be associated with the student's experiences. After the lessons, the level of content knowledge of the students from all schools significantly increased wherein, they were already in the mastery level except the urban lowland schools with full mastery level. The level of critical thinking skills of all the schools significantly increased from low mastery to mastery level. Positive values and attitudes were also developed after the conduct of the lessons. All of these were supported with percentage scores in the tests, ANOVA, Tukey test, Paired T-test, Students' journals, teachers observations and documentation.

54451   10:55-11:20 | Room 607 (6F)
REFLECT: Engaging and Empowering Critical Thinking Through Creative Process Journals
Joselyn Sim, LASALLE College of the Arts, Singapore

Disruption is not only changing the landscape of businesses and the workforce but also pushing learning and teaching approaches to re-evaluate themselves in order for educators to motivate learners to learn in a digital world. In Singapore's tertiary education, learners have moved from the proponents of STEM to STEAM, where an integration of the arts is embedded in most curricula to develop capabilities which are important to a future-ready workforce. Undergraduates must now possess combined competencies, such as problem-solving, creativity and critical thinking. This paper aimed to propose a practical framework underpinned by propositions of the reflective practitioner championed by Donald Schon, with discussions on how the Creative Process Journal (CPJ) is primed by critical and reflective thinking. Its research method would include looking at case studies and gathering insights from the CPJ, a mandatory Unit Of Assessment (UOA) of the main module of a Bachelor of Arts (Hons) programme in Singapore. For the UOA, students would be assessed if they could successfully analyse design paradigms and practices to develop a critical understanding of contemporary design culture as the learning outcome. The paper also aimed to demonstrate positive results of how its students are able to form iterations of creative output through risk-taking, collaboration and experimentation. The pedagogical approach of this study would then be able to nurture future competencies and support strategies for students in other disciplines to enable the scaffolding of the creative process in order to facilitate critical thinking through critical making.

52968   11:20-11:45 | Room 607 (6F)
Making Business Schools More 'Critical' by Teaching Modern Slavery Through Reflexivity
Lidia Gheorghiu, Aston University, United Kingdom

This article invites breaking the traditional pattern in business schools and encouraging management educators to engage critically with their subjects. Conventional methods give a trusting standard of learning; but, they are significantly better at producing followers than leaders or that they do not cultivate leaders at all. This article proposes taking a step further, by making modern slavery the focus of students' reflection. Globalisation and the global population explosion lead to the free movement of people. Through their economic migration or economic transformation, people travelled from developing countries and work when prospects for earning decent wages were limited. However, worldwide, circa 40 million people are now victims of modern slavery, mostly trafficked while searching for better jobs, detained in debt bondage, and confined by poverty and discrimination. While presenting concepts from educational philosophies applied to modern slavery, this article creates an affirmative connection between practice and critical thinking. Critical pedagogy translates in opening the learning space, which links a critical outlook to content and to critical methodology. It contains awareness of self and of the world on top of the conventional classrooms knowledge. It equips students with greater sensitivity to the emancipatory and transformational future perspectives. Teaching reflexivity implies no formula; it only involves awareness on how reflexive practice happens while assisting and being open to the process. Its proposed activities where students are required to write reflective notes stimulate reflection and encourage them to create their own meanings.

54551   11:45-12:10 | Room 607 (6F)
Cultivating Critical Thinking in the Classroom: A Case Study
Nadine Ouellet, LASALLE College of the Arts, Singapore

Academia, industries, and governments agree on the importance and value of critical thinking as a skill for the 21st century and the new knowledge economy. But, how do we cultivate critical thinking in the classroom? A small college classroom has been transformed into a research project and pedagogical lab in which a variety of strategies have been deployed to support and enhance critical thinking. The project focused on the following: creating a nurturing environment in which students felt safe to express themselves, empowering students through the co-design of the curriculum, fostering their independence through self-assessment, and promoting emotional literacy through projects cascading from individual to collective. The first aim of this paper is to argue that critical thinking needs the right environment and framework in order to blossom. The second aim of this paper is to uncover the positive results of our research project in which critical thinking related skills such as analysis, communication, creativity, open-mindedness and problem-solving were cultivated in the classroom through a combination of activities and teaching techniques.

10:30-12:10 | Room 608 (6F)
Saturday Session II
Accessibility & Inclusion
Session Chair: Michelle Somerton

53406   10:30-10:55 | Room 608 (6F)
Yanyan's Sister and the Pig: Interdependence and Dependence in an Individual Transition to Modernity
John Lowe, University of Nottingham Ningbo China, China

Yanyan is a pseudonym for a female Chinese university student from a large and impoverished rural family. This paper, based on a single, long narrative interview and some follow-up material, describes a key part of Yanyan's journey from this severely disadvantaged background to the successful completion of a university degree and entry into modern-sector employment. It would be possible to tell her story as one of independent individual achievement based on strategic decision-making and the strength of her own personality. Indeed, the paper identifies – but does not dwell on – threads in Yanyan's story that fit comfortably with Rational Action Theory, beloved of classical economists with their emphasis on the individual actor as an independent agent. The focus of this paper, however, is on how this apparently independent life management process is actually only made possible by a bedrock of familial and cultural dependence and interdependence that Yanyan portrays as essential to her – and her sisters' - success. Furthermore, not only does her individual success depend on this foundation of interdependence, it simply does not make sense – in Yanyan's mind – to refer to her as being 'independent'. While recognizing the limitations of the approach, the paper uses notions of 'tradition' and 'modernity' as convenient 'theoretical shorthand' for Yanyan's biographical trajectory in order to critique simplistic dichotomies that portray individual independence as a characteristic of the modern individual emerging from a break with interdependencies of the traditional. The paper also provides a commentary on experiences of inter-cultural qualitative research.

54129   10:55-11:20 | Room 608 (6F)
Exploring Education Accessibility and Inclusion for the Underprivileged via Blockchain Technology
Andrei O. J. Kwok, Sunway University Business School, Malaysia

The advent of blockchain technology could challenge the existing paradigms and significantly impact education. Blockchain technology provides efficient data management, security, and authentication of information digitally for all types of record (e.g., certification, assignment, fees payment, and credit transfer) on a publicly distributed ledger. Preliminary findings show that blockchain technology could contribute to the education of the underprivileged, unschooled, and under-schooled in three fundamental areas. First, educators and students can chart their credentials without having an institution as an intermediary. Their proof of work or smart contract is cryptographically signed to allow validation by multiple collaborating parties, specifically employers. Second, formal and informal massive open online courses can reach geographically dispersed individuals effectively at a significantly reduced cost while ascertaining the trustworthiness of the provider, student attainment, and accreditation. Third, the far-reaching and wide-ranging solutions offered by blockchain technology could overcome cost, infrastructural, and institutional barriers in less developed countries. Therefore, the underprivileged, unschooled, and under-schooled can have better access to education, addressing poverty and low literacy rate. Literature review shows that while blockchain technology enables the pervasiveness, quantum and velocity of teaching and learning, research on blockchain for education is nascent. It remains to be seen how exactly the implementation of blockchain technology will exploit the potential benefits highlighted, and how the corresponding barriers can be overcome. With interest of blockchain rising rapidly across all other industries, the aim is to encourage researchers, educators, and policy-makers to examine the potential and value of blockchain technology in education.

53363   11:20-11:45 | Room 608 (6F)
Dependence, Independence and Interdependence: Dynamics and Issues for Counseling and Female Self-education in Relationship
Elizabeth Kristi Poerwandari, Universitas Indonesia, Indonesia

This paper departs from a reflection on the cases of violence or imbalances of power in relationships, particularly those involving women as victims. It is realized that women's psychology is influenced by body-biological aspects, but is even strongly influenced by social construction related to the meaning-making of the body, sexuality, as well as the positions and roles of women. The theoretical perspectives used are the psychology of women perspectives and eclectic gender psychology, combining psychoanalytic, social learning and humanistic approaches that are exposed to feminist and gender-sensitive values. Data is taken through FGDs to social workers, legal advocates and psychologists who assist, conduct counseling, and / or conduct psychological examinations on victims for the benefit of legal processes. They are the ones which so far has been directly faced with victims and can reflect on their situation and psychological dynamics. The research findings show that women experience confusion balancing dependencies, independence and interdependence to arrive at healthy independence and interdependence. This can have an impact on the trapping of women in manipulative or violent relationships, often as victims. In certain cases, there can be a mistake, or a woman becomes a perpetrator. The findings are relevant to understanding women and their relations in a more general context that is not always violent. The findings are also important to be the basis of self-education and counseling for women to enter into healthier and more empowering relationships.

52816   11:45-12:10 | Room 608 (6F)
Being, Becoming, Belonging: The Development of Higher Education Institutional Policy for Inclusion
Michelle Somerton, Nazarbayev University, Kazakhstan

Nazarbayev University was established in 2010 by the first President and is tasked with the mission of being a model for higher education reform and modern research in Kazakhstan. The university's first strategic goal is to ensure the lessons of Nazarbayev University's experiences are transferred and understood by other universities, schools, and research centers. As Kazakhstan has signed international agreements on inclusive education such as the Salamanca Statement (UNESCO, 1994) and Education for All (UNESCO, 2004), the burden has been placed on a range of stakeholders at all levels of education, to meet the country's international obligations. Not only is Kazakhstan placed between Asia and Europe resulting in competing paradigms of understanding and definitions of inclusive education, there is confusion between historical and contemporary definitions of inclusive education leading to the fragmentation of reforms. This paper will discuss the process of developing institutional policy that addresses contemporary understandings of inclusive education and is the first of its kind in this context and others. The research includes the construction of a campus climate questionnaire developed in partnership with the student population and between schools and faculty. The questionnaire explores the attitudes and experiences of undergraduate and post-graduate students based on gender, disability, religion, ethnicity, sexuality, and socio-ecconomic status. At present, pilot study data is available with preliminary data available on the full study in early October, 2019. This research highlights some of the opportunities and challenges faced by higher education institutions in transforming and creating a more inclusive educational landscape.

10:30-12:10 | Room 609 (6F)
Saturday Session II
Student Perceptions
Session Chair: Tsung-Che Chiang

53172   10:30-10:55 | Room 609 (6F)
English Majors' Perceptions of Group Work and English Use in Group Activities
Hung Do, Dong Thap University, Vietnam
Long Le, Dong Thap University, Vietnam

Pair or group work is now widely applied in virtually all types of classroom and it is one of the prominent features of the learner-centered approach and the communicative method in EFL classes. This study aimed to investigate English majors' perceptions toward (1) group work, (2) English use in group activities, and (3) given suggestions for English speaking deployment. The data were collected via a questionnaire from 150 third/fourth-year English majors, Dong Thap University and interviews with 10 target students who had answered the questionnaire and agreed to partake in the interview. The obtained results show that most students highly appreciated the significance of group activities and English use in group work. They also confirmed that Vietnamese speaking is still dominant in practice, and largely agreed on several given suggestions to maximize generic benefits and other language learning merits produced by group work. Accordingly, the current study strongly advocates English use as much as possible in group activities performed by English majors.

54399   10:55-11:20 | Room 609 (6F)
Swimming in an Ocean of Facts and Nonfacts – How High Schoolers Validate Information
Md. Mahmud Hussain, Khulna University, Bangladesh
Md. Alamgir Hossain, University of Dhaka, Bangladesh

Bangladesh, as well as the global community, continue to experience weaponization of information. Information, rapidly diffused through outlets like Facebook, was weaponized to orchestrate mob lynching and other heinous crimes. In the first seven months of 2019 alone, Bangladesh witnessed 43 killings that had resulted from disinformation. This ghastly phenomenon calls for better understanding the mechanism of how information is being validated by individuals nowadays. This qualitative study aimed to explore the insights and experiences of high schoolers on how they process consumption of information, especially the process by which they validate information. Data were collected from eight conveniently sampled high schoolers — two female and two male eighth-graders, and two female and two male ninth-graders — using semi-structured interviews. The analysis shows that the students are knowledgeable about reputable and renowned sources of information. They are also aware about false news, and jargons like clickbait and viral advertising. When consuming information, the students validate them by the reputability of the person who is sharing the news, the reputability of the outlet the news is being released from, the qualitative nature of the news, as well as the presentation of the news. For word of mouth, the students rely on senior family members and relatives for validation. Apart from Facebook and YouTube, they also use frequency modulation (FM) radio and both online and offline newspapers. The students opine that elderly persons are more prone to believing the false news online as they are uninformed about technologies like Photoshopping and deepfake.

53111   11:20-11:45 | Room 609 (6F)
Implementing the Multiple Teaching Strategies in Mechanical Mechanics Teaching to Improve Students Learning Motivate: An Action Research
Chih-Yuan Lee, National Taipei University of Technology, Taiwan
Shu-Hui Tseng, National Taipei University of Technology, Taiwan

Students from industrial and vocational senior high schools in Taiwan usually are not interested in school learning. In order to raise their interest, teachers are trying different teaching method. The purpose of this study is to explore whether changing teaching methods can improve students' learning effectiveness and engagement. Different from the traditional teaching method, this study uses multiple teaching strategies like learning sheet, group discussion, question and answer method, and other teaching strategies. Students' learning status are monitored at any time during the teaching process. The result shows that teachers can effectively increase students' interest in learning and improve the learning effectiveness by using multiple teaching strategies. With learning sheets, students can easily focus on the content. With group discussion activities conduct in class, students are more confident to express their thoughts and share them with each other. With question and answer method, students can easily identify the questions that they are confused. This study also found that students are more willing to answer the questions on the midterm exams paper. However, multiple teaching strategies will require teachers to spend more time preparing for the teaching materials, and the course syllabus must be revised in line with the learning status of students.

53173   11:45-12:10 | Room 609 (6F)
Python Programming as a General Education Course: Students' Background, Perception, and Performance
Tsung-Che Chiang, National Taiwan Normal University, Taiwan

Computer programming education has received a lot of attention in recent years. In many countries, computer programming has been introduced in the official curriculum of different levels of education. This paper is an experience report on a programming course in a university in <> (hidden for double-blind review). The course is a general education course and teaches how to write Python programs for data analysis. First, the course design, including topics, schedules, teaching methods, course activities, platforms, exam tasks, and grading criteria, are described. Then, data collected from two classes, one class in the fall and spring semesters during 2018-2019, are presented and analyzed. The data were collected through one programming pre-test, several questionnaires, and students' work (exercises, mid-term exam, and term projects). Relationship between students' background (e.g. gender, colleges, prior experience, etc.), perception, and performance (e.g. exam scores) is studied. Based on the results, we confirm some findings in the literature and make some interesting observations: (1) genders, colleges, and prior experience have strong relationship with students' performance; (2) the frequency of talking about programming in daily lives could be a successful predictor of students' performance; (3) peer support could be a positive factor for learning programming. We also present students' feedback on the course and difficulties that student would encounter during learning programming. Since most studies on non-computer-science-major programming education were conducted in western countries, this study aims to be a useful reference for teachers in Asian countries.

10:30-12:10 | Room 703 (7F)
Saturday Session II
Internationalisation of Education
Session Chair: Diana Breshears

53296   10:30-10:55 | Room 703 (7F)
Strategies and Characters for the Internationalization of Higher Education in China: Base on the Cases Analysis of Three Universities in Shanghai
Wenjie Liu, Beihang University, China

In order to achieve the "Double First-Class" initiative, China has been active in pursuing internationalization of higher education. Through interviews with department heads of three world-class universities (one comprehensive university, one humanities and social science characteristic university and one science and engineering characteristic university) in Shanghai. We have found that the three universities are all involved in internationalization of higher education, including teacher-student mobility, institution cooperation, reforming student training models, etc. However, the understanding of internationalization of higher education in each university is different, which also highlights the heterogeneity of internationalization of higher education. University A pursues international cooperation and exchange activities. Through the Confucius Institute, the university sends plenty of teachers abroad. At the same time, the university adopts the model of "who invited who manages" strategy. University B pursuits for internationalized from the perspective of a world-class university. The current student training program is mainly the joint cultivation of doctoral students in University B and the ENS Group. University C encourages outstanding students go abroad while attracting merit students come in, such as cooperating with partner institutions. Also, in order to better communicate internationally, the university has rearranged the term time. This study helps the institutions of higher education adopt themselves with the changes of time and the current needs of society. These conditions change the structures and universities' manpower. They also promote the quality of higher education and produce active students.

54401   10:55-11:20 | Room 703 (7F)
Impression of Japanese Universities's Specialized Courses Among Chinese Overseas Students: The Outcome of a PAC Analysis
Wanxin Yan, Tohoku University, Japan
Taira Nakajima, Tohoku University, Japan

This paper aims at revealing the impressions of Japanese universities' specialized courses among Chinese overseas students and showing some viewpoints in international education support. It is processed by 3 Chinese students' interview and investigated by PAC analysis. In the result, clear explanation, collaborative learning with Japanese students, relaxing class atmosphere, teachers' respectful attitude towards student, qualified language skill and adequate professional knowledge are suggested as being important class elements among Chinese overseas students. Moreover, the author discusses some viewpoints for the education support on Chinese overseas students in Japan, such as the professional Japanese language learning support, the professional report writing support, the construction of Japanese teachers' reliability, the improvement of positive participation among Japanese student, and the development of smooth international communication.

53072   11:20-11:45 | Room 703 (7F)
International Online Exchange Program to Promote Cultural Responsiveness in Teaching
Bahia Braktia, Sam Houston State University, United States
Andrey Koptelov, Sam Houston State University, United States
Vera Rozhina, Vyatka State University, Russia
Fouzi Belalia Douma, Higher Arab Institute of Translation, Algeria
Ana Marcela Montenegro Sanchez, Sam Houston State University, United States

As the world becomes a global village and educational institutions become more culturally diverse, teachers and students must understand each other to reach an optimum level of learning. It is crucial to grasp the different cultural differences each person brings into the classrooms to effectively provide more culturally responsive instructions that suit students' needs and learning expectations. However, to achieve full understanding, it requires more than language proficiency, as sociocultural differences present a bigger challenge for students and teachers alike. This study took part among two teacher preparation programs in Russia and the United States and an English language program in Algeria. The purpose of this research was to elicit the attitudes, believes and perceptions of preservice teachers towards teaching students from culturally diverse backgrounds. The Cultural Diversity Awareness Inventory (Henry, 1991) was administered to 140 participants from the three countries. This study also sought to give the participants the chance to interact with students who were culturally different from them. The participants followed The ABC's of Cultural Understanding and Communication Model to communicate with other students. Results revealed cultural responsiveness varied from a country to another. Findings also showed that participants benefited from The ABC's of Cultural Understanding and Communication Model (Finkbeiner & Schmidt, 2006) as it allowed them to examine their own beliefs and explore other people's perceptions of education, family, culture and beliefs. This project offered preservice teachers the opportunity to develop a multicultural mindset to address the needs of students from different cultural backgrounds.

53392   11:45-12:10 | Room 703 (7F)
Choosing to Learn Outside the Classroom: Rural South African Students' Motivation and Benefits of Participating in Voluntary International Virtual Exchanges
Diana Breshears, University of the Free State, South Africa
Rentia du Plessis, University of the Free State, South Africa

In recent years, many universities have adopted virtual learning initiatives to promote intercultural competencies, language acquisition, and global citizenship among students. Virtual exchange is praised as a way to provide international experiences to students who do not have the means to travel and/or study abroad. Current literature on virtual exchange programs largely focus on the experiences of and impact on Western students, with little attention on the developing countries that participate in these programs. The purpose of this pilot study is to provide rural South African students' motivations and perceptions of their experiences with virtual exchange with a large midwestern university in the USA. 47 students at the University of the Free State Qwaqwa campus took part in four virtual online connections with the American students over the course of two months. Unlike the majority of virtual exchange programs represented in extant research, students participated in the program voluntarily as a virtual "club" rather than as part of their prescriptive coursework. Through a focus group interview with 17 of the students at the conclusion of the interactions, we explored their motivations for taking part in the program, as well as their perceived benefits of participation. Students were overwhelmingly positive about their experience and identified three types of advantages for participation: relationship building, professional development, and personal growth. Students stressed that turning the program into a compulsory activity would result in it losing value to them. Implications of findings for future virtual interactions will be discussed.

10:30-12:10 | Room 704 (7F)
Saturday Session II
Interdisciplinary Education: Curriculum Design
Session Chair: Lisa Lam

53403   10:30-10:55 | Room 704 (7F)
Interdisciplinary Learning in STEM Education – The Case of the U-STEMist Scheme
Siu Shu Eddie Lam, The Hong Kong Polytechnic University, Hong Kong
Wing Sze Betsy Yip, The Hong Kong Polytechnic University, Hong Kong

STEM (Science, Technology, Engineering, Mathematics) education emphasizes on the interdisciplinary learning process, which can be divided into two levels namely (a) interactions between different subject areas to enhance the learning of each other and (b) creation and achievement by students through the learning process. In Hong Kong, STEM was first promoted by the government in 2015. As a pilot project on STEM, the U-STEMist scheme is introduced in 2017. It is a 3-year Teaching & Learning Project jointly conducted by The Education University of Hong Kong, The University of Hong Kong, The Chinese University of Hong Kong and The Hong Kong Polytechnic University. The U-STEMist scheme aims at developing STEM literacy in both pre-service STEM teachers and STEM majors through offering interdisciplinary learning experiences for STEM. Two repeated rounds of U-STEMist scheme were completed in year 1 and year 2, respectively. Each round comprises lectures, workshops and visits in the first stage, and service projects with communities partners in the second stage. Participants are required to form project group with students from different universities and disciplines, so as to learn from each others. Two groups of students from the U-STEMist scheme will be used as case studies. The impact of cross discipline learning will be illustrated by analyze the groups' learning process and their performance in the scheme. Groups with more students from difference backgrounds and willing to involve in peer learning are found with better results.

52353   10:55-11:20 | Room 704 (7F)
Developing Multi-disciplinary Learning Experiences and Assessment Rubrics for Building Engineering Project-based Subjects
Ming Yin Chan, The Hong Kong Polytechnic University, Hong Kong
Rodney Wai-chi Chu, The Hong Kong Polytechnic University, Hong Kong

All engineering degree students in the University shall complete a capstone project in their final stage. It does not only provide an opportunity for integration of their knowledge learned in previous stages, it also serves as a vehicle to integrate their hands-on skills and technical knowledge. The main learning and teaching (L&T) activities of the subject are student-centred with emphasis on "Role Play", "Peer Learning" and "Experiential Learning" in promoting real world design skills and communication for students. In addition, evaluation and assessment of learning outcomes for project-based subject is also a great challenge to facilitators. In alignment with the University strategic goals, the department is committed to nurturing graduates with practical skills that could cope with rapid changes, and be able to design and appraise building services systems in a professional manner. Moreover, using online discussion to enhance learning and teaching activities is also one of the departmental goals. The long term impact of the proposed project is how project-based subjects are implemented and assessed. The experience learned from the subject can be shared with other disciplines and academic departments with similar context so that students can benefit most from project-based learning activities. This project will deal with the activities design and assessment rubrics.

53304   11:20-11:45 | Room 704 (7F)
Driving Purpose: Re-purposing Education Through Future Personas
Ray O'Brien, Otago Polytechnic, New Zealand
Samuel Mann, Otago Polytechnic, New Zealand

Learning designers need to create future-fit learning experiences that relate to the learners of their global future and their increasing need for a strong sense of purpose as international citizens. For learning designers to re-purpose education so that is it is future-fit they need think about learners in a different way. Our education systems are still predominantly focused on the provision of services and qualifications rather than transformational experiences. The existing literature does not adequately deal with the complexity and agility required to design for the future - a future which is driven by a need for purpose in a context of exponential change. In this presentation we describe the use of purpose-driven personas in the development and implementation of a new degree aimed at training change-makers for global impact. We present an evaluation of the use of personas to design learning experiences, based on learner's experiences in the first two years of implementation. Our findings will inform the design of future focused, learner determined educational experiences.

53384   11:45-12:10 | Room 704 (7F)
Becoming Interdisciplinary: Implementation of a Structured Interdisciplinary General Education Curriculum in Hong Kong
Lisa Lam, Hong Kong Baptist University, Hong Kong

General Education is an integral part of the Hong Kong Baptist University's (HKBU) effort to promote liberal arts and whole person education. HKBU completed a comprehensive review of its general education curriculum in 2017 and the revamped curriculum has just been launched for AY2018/2019. Unlike most university general education curricula, HKBU's new general education curriculum has a structure that consists of three levels of interdisciplinary learning, from foundational courses (Level 1, 3 categories) to courses in thematic areas (Level 2, 3 areas) and a culminating experience (Level 3 Capstone). This presentation will discuss the potentials and challenges that the University faces in implementing a structured interdisciplinary general education curriculum, one that is independently managed by the General Education Office while all interdisciplinary general education courses are being offered by academic departments. It will examine the tensions encountered in the discipline-based undergraduate curriculum, and how such tensions invite discussion and reflections on interdisciplinary general education.

10:30-12:10 | Room 705 (7F)
Saturday Session II
Early Childhood Education
Session Chair: Shu Chu Yang

54468   10:30-10:55 | Room 705 (7F)
Study on the Development of the Norm of Fundamental Movement Skills for Children Aged Three to Seven
Shu Jung Lin, NanHua University, Taiwan
Chia Yen Tsai, National Dong Hwa University, Taiwan
Shu Chu Yang, National Chiayi University, Taiwan

Childhood is the key period for the development of fundamental movement skills, the acquisition of which has a definite bearing on a child's overall development, including such areas as cognition, interpersonal relationships, social behavior, and environmental awareness. The main purpose of this research was on the development of the norm of fundamental movement skills for children aged three to seven. In this study, we measured the development of such skills amongst 1,029 children in Taiwan aged 3–7 using the Test of Gross Motor Development-2 (TGMD-2). The results indicate that the fundamental movement skills increase with age. With a percentile rank of 50 in the overall fundamental movement skills, the mean score of the eight age groups, boys performed better than girls in the seven age groups. Compared to the United States, Taiwanese five through seven-year-olds lag far behind their American counterparts in locomotor and object control skills, and this situation needs to be addressed by education authorities in Taiwan.

54466   10:55-11:20 | Room 705 (7F)
The Adaptation to School Life by Twins in Different Classes at the Same Preschool
Li-Chun Lin, National Chiayi University, Taiwan

The purpose of this study was to elucidate the adaptation to school life of twins in different classes at the same preschool. A qualitative research methodology was used, and the participants were five-year-old twin brothers, an extroverted older brother, and a depend younger brother. The results were as follows: 1. Learning. When they started preschool at the age of four, the younger twin had severe separation anxiety, and during his first year at preschool frequently cried and sulked. By the second year, however, he became interested in learning. By contrast, the older twin readily adapted to preschool. 2. Following rules. During the first three weeks the younger twin frequently stormed into his brother's classroom, but with the teacher's emotional support he eventually stopped. 3. Interpersonal interactions. After adapting during the first year, the younger brother gradually began to cooperate with his classmates and to make friends. By contrast, the older brother immediately began to interact with his classmates, and made some friends. As for the interaction between the twin brothers, by the second year they got along well and the younger brother had become independent. Suggestions: Preschool teachers need to have an emotional support strategy for dealing with the separation anxiety often experienced by twins and other siblings; it's also suggested that they organize lots of outdoor activities, since this encourages introverted or passive kids to interact with their classmates, thereby helping them to adapt more quickly.

53588   11:20-11:45 | Room 705 (7F)
Designing Experiential Learning Activities for Primary Schoolers
Le My Tra, Đong Thap University, Vietnam

Experiential learning is now deemed a crucial part in primary education in almost all learning contexts because it helps develop and cultivate children's cognitive and life skills. It functions as a bridge linking the knowledge that children acquire in regular classroom and their experiences built up by participating in real life activities, especially beyond classroom. With this in mind, the present study made an attempt to design an experiential learning model with coherent steps for primary schoolers by referencing Kold's theoretical framework (2015). And thereby, this study empirically made a concrete plan and administered a one-day field trip for the primary schoolers in Cao Lanh City, Dong Thap Province, Vietnam. The results obtained are overally positive, but there is room for improvement. Thus, the study makes recommendations to primary school teachers for effectively designing and operating experiential learning activities.

54465   11:45-12:10 | Room 705 (7F)
The Difficult Items in the TGMD-2 and BOT-2 for Taiwanese Preschoolers
Shu Chu Yang, National Chiayi University, Taiwan
Shu Jung Lin, NanHua University, Taiwan
Hsin Ying Chang, National Chiayi University, Taiwan

The main purpose of this research was to determine which items in the TGMD-2 and BOT-2 preschoolers have difficulty with. The methodology consisted of testing and observation. The participants were 40 preschoolers, 20 aged 4–5 and 20 aged 5–6, all of whom completed both of these standardized tests. The findings were as follows: For TGMD-2, In galloping, the 4–5-year-olds lacked a coordinated stride. Over 85 percent of all children were unable to transfer body weight to the front foot. Around 70 percent of the 4–5-year-olds were unable to push a ball with their fingertips, and 65 percent of the 4–5-year-olds were unable to maintain control of a ball for four consecutive bounces without having to move their feet to retrieve it. For BOT-2, all children had difficulty copying a five-pointed star and dribbling a ball with alternating hands. Around 95 percent of the 4–5-year-olds were unable to do the knee push-ups, and 42 percent of them were unable to do sit-ups. It is recommended that preschool teachers should design low structured ball activities, which kids enjoy playing due to the lack of formal instruction. Moreover, instructions and demonstrations should be given in a lively manner, so as to make the activity more appealing. Finally, in light of the difficulties Taiwanese preschoolers have with several of the items (dribbling, dribbling with alternate hands, etc.), we recommend that the scoring criteria be modified based on the results of same tests administered in various countries.

Saturday Session II
Learning Experiences: STEM Education
Session Chair: Siriwan Chatmaneerungcharoen

54481   10:30-10:55 | Room 707 (7F)
Using Video Analysis as a Tool in Teaching Physics
Matúš Sitkey, Constantine the Philosopher University in Nitra, Slovakia
Ľubomíra Valovičová, Constantine the Philosopher University in Nitra, Slovakia

Computer-assisted measurement is part of many disciplines and scientific fields. The use of this technology is no longer a prerogative of highly studied professionals at scientific level, but it is becoming part of the everyday professions. It is important for pupils at primary school to be familiar with the computer-assisted measurements, to have the skills necessary to understand the basic principles, the use of the technology, competencies to read and use the obtained information. The use of computer-assisted experiments thus becomes an important part of primary school teaching. In our research, we focused on using the free Tracker and Coach software. In terms of computer-assisted measurements, we have dealt with parts of the video recording. We analysed one teaching unit, which focused on evenly accelerated movement. As part of their investigations, pupils analysed videos about moving, specifically on the example of free fall. From changing the parameters of the subjects studied, pupils, after video analysis, deduced the individual characteristics of free fall. Questionnaires have been implemented to address the pupils' misconceptions and an increase in knowledge. Research findings show that linking the classical lesson to the free-fall video analysis could be an innovative and effective pedagogy that helps to link abstract physical concepts to reality and thus prevent the emergence of false ideas on the free-fall theme.

53146   10:55-11:20 | Room 707 (7F)
Senior High School Learners' Modern Biotechnology Literacy: Inputs for the Development of Instructional Materials
Ariette De Asis, Alimodian National Comprehensive High School, Philippines
Roel A. Alli, West Visayas State University, Philippines

This study utilized the Instructional Design (ID) using the ADDIE (Analysis, Design, Develop, Implement, and Evaluate) model, which ascertained the level of knowledge and attitude towards modern biotechnology among Senior High School (SHS) learners. This study determined the learning gaps of SHS learners based on their knowledge and attitudes toward modern biotechnology and identified the difficulties encountered by SHS teachers in teaching the concepts of modern biotechnology, which served as the bases in the development of instructional materials (IM). The respondents of this study were 371 learners and 38 teachers of the Second District Public Schools in the Province of Iloilo, Philippines. Three validated researcher-made instruments were utilized: Modern Biotechnology Knowledge Test (MBKT) and Modern Biotechnology Attitudinaire (MBA) for the learners and Modern Biotechnology Survey Checklist (MBSC) for the teachers. Results revealed that SHS learners have low level of knowledge but have favorable attitudes toward modern biotechnology. Unavailability of learners' materials and resources was identified as the major problem encountered by teachers. The developed IM was designed to address the learning gaps and encountered difficulties of SHS learners and teachers. In the implementation of the developed IM, the learners described their learning experiences as fun but not easy, challenging but informative, and interesting but requires in depth understanding. The developed IM gained an excellent evaluation, which may be used by SHS learners and teachers in improving learners' conceptual understanding, while building concrete judgments toward the processes and products of modern biotechnology.

54482   11:20-11:45 | Room 707 (7F)
Popularization of Physics in Informal Education
Matúš Sitkey, Constantine the Philosopher University in Nitra, Slovakia
Ľubomíra Valovičová, Constantine the Philosopher University in Nitra, Slovakia
Ján Ondruška, Constantine the Philosopher University in Nitra, Slovakia

The popularization of science today is a very important and necessary activity of scientists, which should have a positive impact on the general public and also on scientists themselves, and should encourage public interest in science. In the context of popularization, particular emphasis shall be put on the clarity of the information submitted, not only to the scientific community but especially to the general public. Among the greatest barriers between science and society are public mistrust among scientists and their expertise. In the article we present the science show "PHYSIC LIVE", which has been prepared for 1000 primary school pupils in the pre-Christmas period for 10 years. New experiments are each year presented within the science show "PHYSICS LIVE".

54027   11:45-12:10 | Room 707 (7F)
Enhancing Thai Science Teachers' Implementations of Integrated STEM Curricular Units Through a Phenomenological Multiple Case Study
Siriwan Chatmaneerungcharoen, Phuket Rajabhat University, Thailand

Integration of STEM disciplines provide students an opportunity to experience learning in multidisciplinary context. To produce a generation interested and skilled in STEM with school level, the important factor is the teams of teachers who work together in an integrated approach, based on cross- curricular teaching and learning. Teachers play a key role in STEM education, and it is important to attract high achievers with relevant backgrounds into teaching. This research study focused on the understandings, and practice of pre-service teachers to teach STEM. Phenomenological multiple case study is used as framework to understand 5 science teachers' first-time experiences in implementing integrated STEM curricular units in their elementary and middle school science classrooms. This study draws upon both classroom implementation data and teacher reflective interviews to illustrate different degrees of integrated STEM instruction and to understand teachers' challenges and successes with these varying approaches. The findings indicate that pre-service teachers have strong understanding of STEM implementation. The results of this study also presents that the capacity they have built provides them with explicit views on how to teach STEM in schools now and informs what they need for the future teaching of STEM through continually professional development. Pre-service teachers were challenged to make explicit connections between science, engineering, and mathematics while simultaneously maintaining a motivating and engaging context for their students throughout their instruction.

13:10-14:50 | Room 604 (6F)
Saturday Session III
Language Learning – Vocabulary
Session Chair: Minako Inoue

54538   13:10-13:35 | Room 604 (6F)
Using Graphic Organizers for Learning in English Writing Course
Ya-Ling Wu, National Chin-Yi University of Technology, Taiwan

Many studies have shown that the use of graphic organizers (GO) can improve learning in many aspects including reading, comprehension, vocabulary, etc. This study aimed to investigate the effect of graphic organizer on learning in writing course for college students. There were 50 sophomores participated in this study for one academic semester (eighteen weeks). From the first week to the eighth week, students were taught the contents in the textbook without using graphic organizer. On the other hand, from the tenth week to the seventeenth week, the teacher utilized graphic organizers to convey the contents of the textbook in teaching. An achievement test was given in the ninth week and the eighteenth week respectively. In addition, a questionnaire which contained 30 questions in Likert scale was distributed to the students in order to understand their learning attitude toward to the use of graphic organizer in class. The scores in the two achievement tests were analyzed with a paired t-test. The findings showed that graphic organizers were conducive to students in learning the contents in the textbook.

54309   13:35-14:00 | Room 604 (6F)
Using Mobile Games to Enhance English Vocabulary Knowledge: A Case Study of Thai Employees in an International Workplace
Nichakan Horphet, Srinakharinwirot University, Thailand
Supaporn Yimwilai, Srinakharinwirot University, Thailand

Vocabulary knowledge is significantly important for English language communication. However, research studies have reported that English as a foreign language (EFL) were lack of sufficient English words to use for speaking and writing. The issue is currently also being problematic for employees in many international workplaces who specialized in other skills rather than English, but require the skill of English to use in their workplace. This study was designed to investigate the effect of mobile games on Thai employees' vocabulary knowledge, as well as to investigate attitude of Thai employees towards vocabulary acquisition through mobile games. The participants were twenty-five EFL employees. The research instruments employed in this study comprised of an English vocabulary test and a semi-structured interview. The quantitative data from both pretest and posttest were analyzed by the mean scores, standard deviations, and t-test analyses. For the qualitative data, the semi-structured interviews were analyzed by content analysis. The results of this study showed that employees could improve their vocabulary knowledge from using mobile games. There were statistically significant differences between pretest and posttest scores, including the mean scores of the group of employees. In addition, the level of attitude toward using mobile games to enhance vocabulary knowledge was highly positive.

52834   14:00-14:25 | Room 604 (6F)
Improving Vocabulary and Confidence Through Extensive Reading
Joel Weinberg, Meiji University, Japan

Extensive Reading has been touted as beneficial for improving students' reading fluency, speed, confidence, and vocabulary. This paper explains how teachers can observe and measure these last two claims. Administering vocabulary level tests at the start and end of the semester indicates that there is a positive correlation between Extensive Reading and an increase in receptive vocabulary size. Additionally, students' self assessment surveys of their vocabulary size show that Extensive Readings also raises their confidence in their vocabulary, which feeds into a self-propelling virtuous loop: reading leads to improved confidence, which leads to more reading. These findings should reaffirm the virtues of Extensive Reading for teachers who are already committed to it, and convince teachers who would like to see more evidence of the benefits that result from Extensive Reading.

54201   14:25-14:50 | Room 604 (6F)
Vocabulary Teaching and Students' Perception in an ESP Course
Minako Inoue, Health Science University, Japan

In the ESP approach, acquiring relevant vocabulary plays a crucial role in success in learning. Since the vocabularies in ESP are unique to their respective fields, students are required to master technical or semitechnical vocabulary in their designated fields in addition to general vocabulary. The current study presents one approach, providing procedures and concrete example, to teaching a body of ESP vocabulary difficult to learn or master. Meanwhile, the study uses questionnaires to examine students' perception and evaluation of this approach. The data were entered in SPSS for descriptive approaches as well as correlational analysis. The classes involved were two Physical Therapy (PT) major classes, each consisting of 54 students. The study reveals that even though students feel the importance and benefits of vocabulary learning, especially ESP-related vocabulary, they are not making efforts to increase their vocabulary. Not a few students claim they rarely look up the meaning of unknown vocabulary in class. In such a situation, the results of students' perceptions and evaluation of instruction emphasizing vocabulary learning revealed that all activities were perceived as beneficial. Although Ministry of Education, Culture, Sports, Science and Technology in Japan emphasizes the importance of vocabulary, no clear or concrete directions for implementing effective vocabulary teaching have been stipulated. Therefore, the challenge that English teachers face is to create learning environment that motivates students to increase their vocabulary. Careful examination on needs assessment should be performed so that necessary steps can be implemented.

13:10-14:50 | Room 605 (6F)
Saturday Session III
Teacher Education
Session Chair: Emily Oon

53404   13:10-13:35 | Room 605 (6F)
STEM Education in the Hong Kong Tertiary Sector – "Train-the-Trainer" Approach
Siu Shu Eddie Lam, The Hong Kong Polytechnic University, Hong Kong
Wing Sze Betsy Yip, The Hong Kong Polytechnic University, Hong Kong

In Hong Kong, STEM (Science, Technology, Engineering, Mathematics) education was first promoted by the Hong Kong SAR Government in 2015, targeted primary and secondary students and emphasized on enriching the curricular of Science, Technology and Mathematics. The insufficient interdisciplinary teaching and learning experiences, which are essential for teaching STEM, and insufficient engineering element in STEM education could be the major challenges to the school teachers in Hong Kong. In 2017, the U-STEMist scheme, under a joint university Teaching & Learning Project of The Education University of Hong Kong, The University of Hong Kong, The Chinese University of Hong Kong and The Hong Kong Polytechnic University is conducted. It is a three-year programme adopted the "train-the-trainer" approach and aims at developing STEM literacy in both pre-service STEM teachers and STEM majors through offering interdisciplinary learning experiences for STEM. Two repeated rounds of activities through learning and applying STEM were completed to serve the need in Hong Kong community which have successfully enhanced the participants' self-development. To maximize the impact of the scheme, a massive open online course will be developed under the scheme, aim at enhance STEM knowledge of primary and secondary school teachers in Hong Kong.

52966   13:35-14:00 | Room 605 (6F)
What Do We Know About Reading Aloud in Teacher Preparation Program: A Summary of Research
Tati Lathipatud Durriyah, Universitas Islam Negeri (UIN) Jakarta, Indonesia

Read aloud activity can be found in many literacy classrooms. Enough body of knowledge describes benefits of reading aloud for literacy development. In teacher education, the extent to which student teachers are prepared to conduct read aloud activity has been a focus of examination. This presentation reports a research summary about reading aloud in a teacher education context as accessed through CITE-ITEL a web access that identified empirical studies of initial preparation in the area of literacy, and through ERIC.ed.gov. Keywords such as 'read aloud,' and 'aloud' were used to generate studies contained reading aloud references. A major summary of research about reading aloud in teacher education program include the importance of giving student teachers a complete experience of reading aloud practice on a regular basis. Student teachers need to acquire the habits of doing an advance preparation and deep knowledge of both an appropriate text and relevant strategies for reading aloud, e,g., improving student teachers' expression when reading aloud. When it comes to practice read aloud in a real setting, research shades some lights on areas of student teachers' concerns. For instance student teachers tended to pay attention to read aloud management and the use of interactive read aloud language. Especially in a bilingual context, student teachers grew an awareness of bilingual learners and general language development issues. Multicultural books used in interactive read aloud became a springboard for students' authentic response and in the process student teachers gained an open-minded view towards having a multicultural curriculum.

52818   14:00-14:25 | Room 605 (6F)
Teaching Strategies and Media used by Pre-Service English Teachers on Digital Era
Yentri Anggeraini, Baturaja University, Indonesia

The digital era allows education practitioners to be literate on digital tools to support the learning process. As the future teachers, the pre-service teachers must be ready to face the technology changes, learn how to make teaching and learning process more interesting and meaningful, and how to apply the digital tools and media well. This qualitative case study aimed at evaluating the pre-service English teachers` teaching strategies and their media on Micro Teaching class. Observation, document in form of lesson plan, and audio-visual material were used to gather the data. The participants of the study were 20 of the sixth-semester students who joined Micro Teaching. The raw data were analyzed following the six steps of Creswell's qualitative data analysis. The findings indicated that role play, read-aloud, question-answer, discussion became dominant teaching strategies and the participants used visual media and audiovisual media. The visual media that had been used including the printed pictures, real objects, and flashcard meanwhile for the audio visual media was downloaded video: animated stories and nursery rhymes. This present study suggests that teacher candidates must upgrade their knowledge and competences on the use of digital media and effective teaching strategies in digital teaching.

54752   14:25-14:50 | Room 605 (6F)
The Use of E-portfolio to Facilitate Self-Reflection About Learning by Pre-Service STEM Teachers
Emily Oon, University of Macau, Macau

Learning is not a one-time event but an ongoing process where learners advance from a stage to another with new knowledge learned and skills gained formed the foundation for cognitive and behavioral changes. Self-reflection is the key supporting the formation of new learning. What often occurred in class is that learning activities are not paced for self-reflective activities. While many higher institutions find ways to shift the passive teacher-centered teaching to learner-centered learning, many proposed external solutions. What has been neglected is priming way for students to think and analyze, which means to reflect their own learning journey; an internal solution. This work presents how pre-service STEM teachers document their reflections after each lecture of an undergraduate course using e-portfolio. The course aims to equip them with knowledge of the three main STEM curriculum components, namely STEM contents, learner-centered STEM pedagogies and formative assessments. Findings suggest that reflections leads to deeper understanding, increased engagement and confidence to be a high quality educator, despite of in lack of teaching experiences. By modeling the effective use of e-portfolio in documenting reflections about learning, the pre-service teachers experience firsthand beyond the traditional content dissemination teacher-centered teaching and as such they are likely to prime learning for their students in such a fashion that would eventually improve and modernize K-12 STEM learning.

13:10-14:25 | Room 607 (6F)
Saturday Session III
Mind & Brain
Session Chair: Kourtland Koch

53608   13:10-13:35 | Room 607 (6F)
Towards Better Brain Training: A Computational Cognitive Modelling Approach to Improving the Design of Executive Function Training in Educational Contexts
Nigel Robb, University of Tokyo, Japan

Executive functions (EFs) are high-level cognitive abilities which coordinate lower-level cognitive abilities. Research demonstrates the importance of EFs in many contexts, including health, social functioning, and education. Aspects of EFs may predict academic performance; it has also been suggested that computerized EF training may benefit both children and adults in education and daily life. However, research on the effectiveness of current EF training programs is controversial. Recent criticism of companies that develop and market so-called "brain training games" focuses primarily on the fact that some such companies have overgeneralized the potential benefits of EF training without enough evidence to support their claims. One specific issue is that the mechanisms by which such training might be effective are not well understood. Researchers now recognize that, to ensure sound investigation of the effectiveness of EF training, it is essential that we consider systematically how specific features of these programs may contribute to improving EF. The current study demonstrates the feasibility of a novel method, using computational cognitive modelling, to investigate these specific mechanisms efficiently. Using a prefrontal cortex model implemented in the Leabra cognitive architecture, several potential EF training mechanisms (based on tasks found in popular EF training games) were simulated: in this short paper, some representative examples are described. The main contributions of the current study are (1) to demonstrate the feasibility of this novel approach, and (2) to demonstrate, in a non-technical, accessible way, how it may be utilized to potentially offer more effective EF training in an educational context.

53410   13:35-14:00 | Room 607 (6F)
A Study on the Feasibility of EEG to Improve the Application of Educational Objectives in Vocational Education Psychomotor Domain
Wen-Tsai Huang, National Taipei University of Technology, Taiwan
Chin-Yen Lin, National Taipei University of Technology, Taiwan
Don-Yang Fong, National Taipei University of Technology, Taiwan

Taiwan's vocational education values the practical skills. The primary goal is to cultivate students' abilities to meet the needs of the workplace. The psychomotor domain is a combination of "Psycho" and "Motor". The connection of basic motor will form skills for different tasks. The performance of physical activities will promote the interpretation of cognitive functions and various psychological states. The use of EEG is one of the methods to measure motor skills in psychophysiology. The purpose of this study was to investigate the feasibility of using EEG to improve skills development through literature analysis. It were found that there was a lot of improvement in athletic motor skills, including the use of EEG to improve archery targeting, and it was also found in the literature that there were also artifacts caused by body movements that the researcher could not control. Due to the nature of individual movement, even when two people are doing the same action and their brains perform the same message processing mode, they will show different levels of motor behavior because of their skills difference. This study suggested that EEG should be applied with the appropriate practical skills category in order to help the contestants or students to improve their national vocational skills and increase their level of confidence and achievement.

53083   14:00-14:25 | Room 607 (6F)
Working Collaboratively Among Neuroscience and Education to Foster Better Understanding of Cognitive Development
Kourtland Koch, Ball State University, United States

To date, both neuroscience and education have focused on cognitive development, yet both sides have often neglected how they can work collaboratively to identify and monitor strategies which produce clinically based results that can be applied to educational practices. Encouraging teachers to turn their attention to social and emotional environments in which children encounter learning; it becomes possible to modify educational practices based upon neuroscience. If we can learn to appreciate the diversity of strategies that researchers apply to answer a specific question, then education may also benefit by emphasizing the importance of teaching different strategies and helping students develop the skills necessary to be able to take different approaches to a problem. Research in neuroscience, cognitive science, and educational research has intensified in recent years. These endeavors have provided an opportunity to understand and apply current research findings with the hope it may eventually be possible to identify selected teaching methods associated with specific types of brain activation. Additional outcomes may be informing teachers how the brain works and develops as the child progresses through school, based on developmental milestones from birth through the adult years. This will require teachers to become more critical when evaluating the latest neuroscience findings to avoid the misapplication of concepts which have been noted by Bruer (1998) and others (Fischer, 2009) over the past 20 years.

Saturday Session III
Inclusion
Session Chair: Tsediso Michael Makoelle

53385   13:10-13:35 | Room 608 (6F)
Independent, Dependent or Interdependent? A Cross-sectional Study of Self-formation by Chinese Students in a Sino-British University
Fang Yu, University of Nottingham Ningbo China, China

A Sino-British university might be expected to exemplify the contradictions between the 'collectivism' of 'Oriental' and the 'individualism' of 'Western' ideologies. My research asks whether Chinese students in such an institution (The University, TU) experience such contradictions and, if so, how they respond to them in their active participation with self-formation. My data are cross-sectional, coming from extended interviews with 46 students at different stages of their studies at TU. TU professes to promote habits of independence in thinking, problem-solving, decision-making, and more, which differs from these students' prior educational experiences. In order to succeed at TU, 'new' Chinese students must negotiate a transition from their familiar habits of dependence on teachers, family and others for their studies and daily lives. 'Old' (second to fourth year) students gradually learn how to deal with the unfamiliarity of TU and re-construct themselves to be 'independent' learners, as TU expects. Of particular interest, however, is the way in which many students mobilise interdependence with their roommates/friends and co-learners, also with tutors, to address the expectations of TU. At a cultural-theoretical level my analysis of these students' active engagement with their identity (re)construction highlights and expresses the fallacy involved in the presentation of in- and inter-dependence as a dichotomy. The development of 'independence' emerges in fact as being dependent on the 'interdependence' that characterises the very nature of all human societies, whether large or small.

54561   13:35-14:00 | Room 608 (6F)
Females Choosing Computer Science Courses? Australian and Taiwanese Perspectives
Shu-Hua Chao, Monash University, Australia

The underrepresentation of females in IT-related studies in secondary and higher education has been an ongoing issue for more than the past two decades. Computer science (CS) is one of the IT-related fields which has long been characterised by low female participation in undergraduate courses. This study examines key factors that influence the choices of undergraduate Computer Science (CS) and non-CS (NCS) courses by females in the educational contexts of Australia and Taiwan. Using Eccles et al.'s (1983) expectancy value model, the following were used to explore females' CS and NCS course choices: a) previous CS achievement-related experiences; b) subjective task values (e.g., interest—enjoyment, attainment, utility and relative cost); and c) individuals' perceptions of CS-related courses and careers. Results from this mixed-methods study (Phase 1 surveys: 81; Phase 2 interviews: 11) revealed 'personal interest' was the most important factor for course choices by the majority of females surveyed in both contexts. However, interview findings revealed other factors such as: a) previous IT related learning experiences; b) individuals' perceptions and understanding of IT or CS-related studies and careers; and c) other subjective task values attached to IT/CS related learning. An important conclusion is that while personal interest was the key factor for Australian females' course pursuit, previous IT related learning and perceptions of the studies and careers also influenced their course choices. Taiwanese females, in contrast, placed a greater attainment value on attending a prestigious university, as well as career prospects, when making their course choices.

53947   14:00-14:25 | Room 608 (6F)
Better Teaching, Better Learning: Engaging Students Through Classroom Inclusion
Sharon G.M. Koh, Monash University Malaysia, Malaysia
Juliana French, Monash University Malaysia, Malaysia

The higher education landscape is fast changing with culturally diverse classrooms that present both opportunities and challenges. Students come into universities with ingrained beliefs about teaching and learning. In a culturally diverse classroom, these worldviews are often confronted. Furthermore, indoctrinated cultural stereotypes about teaching and learning are tested. Thus, the culturally diverse classroom is as much a battlefield for the learner as it is an orchestra for the educator. Additionally, students have to navigate the travails of assessments. The question remains "How do we foster student-centeredness in a culturally diverse classroom?" As such, effective delivery in teaching becomes vital to resolve the gap between student engagement and knowledge retention. This paper report results from active learning strategies conducted over one semester for different units presented as two case examples.Findings reveal the need for educators to continually engage students as new technology is ubiquitous to students' day-to-day life. Compounding the challenge is an increasingly culturally diverse and geographically dispersed classroom. The educators demonstrate how active learning can promote an inclusive environment to break down any idiosyncratic and cross-cultural barriers. Unlike self-learning, independent learning focuses on individual experience, whereby the educator helps the students see the big picture by building comprehension and synthesis of the subject matter. Building upon a responsive setting for mutual participation, the formal and informal curricular become blended, and thereby contribute towards profound educational experience.

53335   14:25-14:50 | Room 608 (6F)
Teacher Education and Inclusive Education in Kazakhstan
Tsediso Michael Makoelle, Nazarbayev University, Kazakhstan

Kazakhstan is in the process of implementing inclusive education at all levels of its education system including in teacher education institutions referred to as pedagogical universities. The implementation of inclusive education is marred with challenges, anomalies and contradiction. The aim of the study was therefore to explore the governance, curriculum and pedagogical needs of Kazakhstani pedagogical universities in implementing inclusive education. These needs were determined by exploring first how inclusive education is defined and conceptualized within pedagogical universities, determined the extent to which inclusive education is made part or incorporated into the curriculum of pedagogical universities. Furthermore, the study was also identifying governance and pedagogical practices that hinder or promote the implementation of inclusive education within the context of a Kazakhstani pedagogical university. This was a qualitative study which used unstructured interviews to 10 teacher educators and 5 pre-service teachers in two pedagogical universities and a pedagogical college. Furthermore, 5 in-service teachers were interviewed in two mainstream schools in Kazakhstan. The study identified several governance, curriculum and pedagogical barriers and challenges for implementation of inclusive education and makes recommendations towards the enhancement of inclusive education in Kazakhstan.

13:10-14:50 | Room 609 (6F)
Saturday Session III
Ethnography
Session Chair: Renato Jr. Herrera

53486   13:10-13:35 | Room 609 (6F)
Hall Life Education: A Reflection on Cultivating Independence in Hong Kong University Students
Amy Lee, Hong Kong Baptist University, Hong Kong

In a densely populated city such as Hong Kong, one of the most remarkable experiences young university students may have is staying at the student residence and becoming "independent" in terms of taking care of themselves. Resident places in the university are highly competitive, not only because of its location on campus but also because of its relatively economy compared to renting a place in the commercial market. Young university students who would like to experience a relatively independent and private life may find this option most attractive, as the resident halls are run by the university, and thus are well-supported, safe, convenient, and generally designed to facilitate personal and intellectual growth. The presenter is an academic, concurrently a new Resident Master of a student residence hall in Hong Kong. The presentation is a reflection on the "other" aspect of university education that is different from what takes place in the lecture theaters. From this professional experience of being Resident Master, the presenter would like to review an example of Hall Life Education, and reflect on its effectiveness in nurturing personal and intellectual growth in Hong Kong young people. Among the various factors in personal development, independence in self-care, intercultural competence, adaptation of a healthy lifestyle, and critical thinking would be the main factors discussed.

53014   13:35-14:00 | Room 609 (6F)
The Ethnomathematics of the Bukidnon Karulano Indigenous People Towards the Development of Instructional Materials
Renith Guanzon, STI West Negros University, Philippines
Emellie Palomo, West Visayas State University, Philippines

This ethnographic research aimed to determine the ethnomathematical concepts and ideas of the Bukidnon Karulano indigenous people in Kabankalan City, Negros Occidental, Philippines. The informants were the 5 Council of Elders, 2 IP members, 4 school learners, and 2 mathematics teachers. The needed data were gathered using observation, interview, focus group discussion, photo and video elicitation. These data were analyzed using Spradley's Ethnographic Research Cycle. The study revealed that the indigenous people hold an abundance of ethnomathematical ideas and concepts along the areas of counting, measuring, classifying, ordering, inferring, and designing. The common methods used by the Bukidnon Karulano in learning their ethnomathematical concepts and ideas are observation, imitation and modeling, apprenticeship, storytelling method, and participation in IP celebrations. School learners use their ethnomathematical concepts and ideas in learning mathematics in formal education through abstraction, representation, and authentic learning. The developed instructional materials integrating the ethnomathematics of the IP was formulated to contextualize mathematics education experienced by the school learners. These materials can be utilized in teaching mathematics for Grades 6, 7 and 9. Finally, it is recommended for teachers in mathematics to use and expand the material which may include additional topics and activities. It is further recommended that future researchers may consider investigating the effectiveness of these developed materials in the mathematics' achievement of the IP school learners.

52737   14:00-14:25 | Room 609 (6F)
Gathering of 'Tacit Knowledge' Through Oral History
Zanaria Saupi Udin, Universiti Malaya, Malaysia

The University of Malaya is the oldest campus in the country. Over the years, many of its scholars including professors and staff have retired; many who are distinguished and reputable experts in their fields. Hence, there is a need to gather tacit knowledge from these individuals rapidly before the information are vanished forever, particularly non-quantifiable knowledge about social interactions that explained how decisions were made, how groups worked together and how communications flowed so that this crucial information can be passed on to future generations for reference and as a guidance. Such knowledge while unpublished, are commonly conveyed by narrative, although it is impossible to represent the knowledge explicitly. This paper provides an insight on the oral history project conducted by the University of Malaya Library and how the 'tacit knowledge' was gathered. It examines challenges in developing such spectrum of knowledge and discusses how the issues can be overcome. It is also hoped that through oral history, the depth of understanding from various perspectives and different situations could be further heightened. Furthermore, individuals are able to share their stories in their own words based on their own interpretations which are then recorded and preserved.

53052   14:25-14:50 | Room 609 (6F)
Mathematics of the Fisherfolks: Basis for Contextualized Teaching-Learning Materials
Renato Jr. Herrera, Jose Monfort National Science High School, Philippines

This design ethnography was conducted in two fishing villages in Barotac Nuevo, Iloilo, Philippines to gather data about the mathematical activities of the fisherfolks, the mathematical ideas that they integrated into their activities, and problem-solving situations faced by the fisherfolks. The data were used as inspiration and grounding for designing and developing a context-based teaching-learning materials that are culturally appropriate for learners in coastal communities. Seven key informants were chosen purposively. Participant observation, ethnographic interviews and elicitation techniques were used for data gathering and triangulation. Futhermore, IDEO's design thinking toolkit for human-centered design were used as guide for designing and developing the contextualized teaching-learning materials. The analyses using LeCompte's item, pattern, and structure level analysis revealed that fisherfolks integrate mathematical ideas into their activities. Moreover, the work-related problem-solving situations faced by fisherfolks were: (a) locating submerged fishing gears, (b) attaching floats and sinkers, and (c) releasing fish fry into a pond. To address these problem-solving situations, fisherfolks used trial-and-error method, making decision based on previous experiences, and creative thinking and resourcefulness. These results can be used to mediate learners' culture and mathematics education through using cultural artifacts as ethnomodels and using social situations as context. All of these were integrated into the Mathematics of the Fisherfolks, a context-based mathematics activity book for junior high school learners, and the Teaching Guide on Mathematics of the Fisherfolks.

Saturday Session III
Internationalisation of Education
Session Chair: Syed Jamali

53444   13:10-13:35 | Room 703 (7F)
Trends & Futures of International Higher Education Partnerships & Collaboration: Comparative Potential Pathways for African & Asian Centres of Excellence
Nyambura Mwagiru, University of Stellenbosch, South Africa

In a world characterized by the potential and promise of dynamic change and increasing complexity, it is paradoxical that amidst notable and significant levels of economic development, creation and growth of wealth, and lowering of global poverty, there yet remains the scourge of wide-spread inequality, exclusion and escalating levels of violence. These changes impact many communities globally, further compounding their vulnerability. ("Rethinking Education: Towards a Global Common Good?", UNESCO Report, 2015). In international higher education delivery, other significant factors affecting global dynamics include technological innovations, digital options and platforms like the internet, which render geography irrelevant. Additional workplace demands include the need to build capacity in communication and critical thinking skills that are driving post-traditional forms of higher education. However, these are more easily acquired from informal learning experiences than through formal institutions. Questions therefore arise pertaining to relevance of international education, in a world where information is expanding exponentially, and shared through gaming, virtual reality, text messaging, social reading, and social networking. In such contexts, would formats beyond traditional semester systems work best in educating the next generation of business and community leaders? In a time of 24/7 "point, click, study," just-in-time training, and asynchronous learning, our presentation explores and contrasts Asian and African approaches to internationalisation of business education, and inquires if traditional "bricks and mortar" concept of universities and higher education institutions (HEIs), will remain a viable option for collaborative international education partnerships.

52338   13:35-14:00 | Room 703 (7F)
A Framework for Harmonization of ASEAN Graduate Science Education Curriculum
Glen Mangali, Colegio De San Juan De Letran Manila, Philippines

Higher Education Institutions prepare people in a globalized economy. In the teaching profession, this may be addressed by pursuing post-graduate education and becoming teachers as learners. However, there is a gap in meeting the expectations of each institution in the global arena. The disparity is vividly shown on the different expectations and learning outcomes of post-graduate science education programs in different universities in ASEAN region. Hence, the current study is intended to fill the curriculum and program expectations gap in post-graduate science education which may affect the intended learning outcomes, content, teaching and learning method and assessment. The research employed case study method approach where the program in each country was examined one at a time. In this design, both the qualitative and quantitative data were collected concurrently. The results of the study showed that research, globalization and commitment are common educational pressures that influence the graduate science education curriculum in three countries. Through these educational pressures, various points of convergence and divergence in four curriculum elements were identified. Finally, the RIPILO Top Down Framework for harmonizing the curriculum in ASEAN Region was developed. The RIPILO Top Down Framework can be used in exploring connections which may engage ASEAN community in the region with emphasis on producing regionally competent students who are globally competitive and culturally accepted. It is in response to the educational reforms happening in ASEAN to produce future science education faculty, researchers and educational leaders who are multi-culturally ready.

53834   14:00-14:25 | Room 703 (7F)
Negotiating Pedagogy Across Cultural and Educational Spaces in International Professional Experience Placements
Debra Edwards, La Trobe University, Australia

How are understandings of pedagogy constructed, disrupted and negotiated by teacher education students? Professional Experience placements have long been, and continue to be, an integral part of Initial Teacher Education (ITE) and transition to the profession. Similarly opportunities to study in an international setting have a long history of inclusion in Initial Teacher Education and are seen as enhancing student growth, personally and professionally, as well as challenging students to consider issues of change, and diversity (Bennett, 1986; Parr et.al. 2017). In this presentation ITE student learning and teaching experiences during two short term international opportunities; one in urban and rural India and one in a regional Swedish city are examined. The initial findings indicate that short term international professional experience placements have the potential to conceptually challenge students' existing understanding of pedagogy, and the role of the teacher, as they experience teaching and learning in unfamiliar and uncertain settings.

53281   14:25-14:50 | Room 703 (7F)
Determining Gaps Between Expectations and Reality When Studying Overseas: Graduate Diploma Students in a Private Training Establishment (PTE) in New Zealand
Syed Jamali, ICL Graduate Business School, New Zealand
Dayal Talukder, ICL Graduate Business School, New Zealand

The aim of this research was to explore the gap between the initial expectations of students and the reality of studying overseas. Many countries, including New Zealand, have become important destinations for international students in recent years. When deciding to study in foreign countries, students are influenced by a number of factors in destination countries including the reputation of educational institutions, living costs, fees, whether the country is easy to enter or not, the possibility of immigration, job opportunities, security and lifestyle. Therefore, this study investigates foreign students' expectations compared with the reality of studying in New Zealand, in order to understand their views and motivations in studying in the country. Graduate diploma students from one Private Training Establishment (PTE) have been investigated as a case study. The study applied a mixed method research approach – a combination of the elements of both quantitative and qualitative analysis. A questionnaire technique was applied to collect primary data. The findings reveal that international students choose New Zealand as a destination because they believe that the country has a safe and peaceful environment, a high possibility of permanent residency after study, and a well-reputed education system. They generally experience difficulty in finding a job, which contradicts their prior expectations. They find that study is harder than in their home countries because of the language barrier, cultural differences and a different education system. They suggest that the school should provide support to help them find a job and should provide an internship programme.

Saturday Session III

Higher Education: Flipped & Blended Classrooms
Session Chair: Dasim Budimansyah

53863   13:10-13:35 | Room 704 (7F)
Understanding and Promoting Student Engagement in Higher Education (HE): Insights From Malaysia
Ida Fatimawati Adi Badiozaman, Swinburne University of Technology Sarawak, Malaysia

Student engagement's strong association with quality teaching and learning, and student success is both substantial and unassailable. This paper reports on a mixed-methods project funded by the Ministry of Education, Science and Technological Research investigating student engagement in four higher education institutions in Sarawak, Malaysia. In particular, the project sought to understand what engages students in the Malaysian higher education at the individual level. We also sought to understand what students did themselves to engage in their learning (as opposed to making others responsible for their engagement). The study utilised the Student Engagement Questionnaire (Zepke, Leach & Butler, 2013). Approximately 980 questionnaires were distributed via partner researcher-practitioners within their institutions and 838 questionnaires were returned resulting in a positive 85.5% usable response rate. Findings revealed that autonomy was important for student engagement. This was followed by sense of competence and belonging. In unmasking what students do to engage in their learning, it was revealed that at HE level, the student engagement is predominantly independent in nature, driven by a high sense of agency and future goals. Further exploration in the qualitative phase affirmed this and highlighted the importance of creating learning environments that enhances purposeful and meaningful activities in learning, in order to (i) enhance students' perception of competence; and (ii) make clearer links between activities in class and students' goals. It can be surmised that student engagement in HE can be enhanced and sustained meaningfully through capitalizing on internal and external factors that impact on student actions.

53342   13:35-14:00 | Room 704 (7F)
Perceived Benefits and Challenges of Flipped Classroom: Voices From Teachers in Hong Kong's Higher Education
Alan Hiu Hin Tse, The Chinese University of Hong Kong, Hong Kong
Paul Lai Chuen Lam, The Chinese University of Hong Kong, Hong Kong
Hilary Ka Yan Ng, The Chinese University of Hong Kong, Hong Kong
Carmen Ka Man Lau, The Chinese University of Hong Kong, Hong Kong

Flipped classroom is increasingly being adopted in higher education institutions worldwide. Many studies on flipped classroom focused on evaluating its impact on students' learning outcomes. Relatively little is known about the perceived benefits and challenges of flipped classroom from the teachers' perspective. The present research conducted in-depth interviews with 21 teachers from diverse academic disciplines in five different universities in Hong Kong. These teachers were recruited to share their experiences in adopting flipped classroom in their practice. Flipped classroom was found to be associated with many benefits to the teachers, such as gaining the flexibility in the use of valuable class time, enhancing the quality of teaching, and increased opportunity for the teachers' professional development. However, there are challenges in adopting flipped classroom in their teaching practice. Specifically, many found it challenging to motivate students to engage in the pre-class learning material. Their workload also increased when implementing and managing the flipped classroom. It was also difficult for them to choose suitable pre-class learning materials. The teachers also shared a variety of strategies to overcome these challenges. For example, they provided incentive to motivate students to prepare for pre-class learning materials. Some look for high-quality pre-class material from public domain to reduce workload. Many believed that further institutional support are needed to fulfil the full potential of the flipped classroom approach. Possible measures that could help teachers to reap the benefits of this new learning approach while mitigating the challenges will be discussed.

53973   14:00-14:25 | Room 704 (7F)
The Implementation of Flipped Classroom: Students' Responses from Different Fields Area of Study in Higher Education
Ima Isnaini Taufiqur Rohmah, IKIP PGRI Bojonegoro, Indonesia
Ifa Khoiria Ningrum, IKIP PGRI Bojonegoro, Indonesia
M Zainudin, IKIP PGRI Bojonegoro, Indonesia

In this 21st century is the milestone of the implementation of the Flipped classroom. It was popular as a means to support student learning in all level of education, especially in higher education by requiring students to prepare before lectures and actively engaging students during lectures. While some research has been conducted into teachers' preparation, student performance in the flipped classroom, students' responses throughout a flipped course has not been investigated. This study under qualitative case study explored students' responses throughout a flipped by means of bi-weekly diaries. 15 students from 3 different fields were involved to gain the data. Those 15 students consisted of students from Economics, Mathematics, and English Education Department. The results indicated that for about 75% students considering that Flipped classroom model is more interesting than traditional one and the rest considering that Flipped classroom model is quite hard to be implemented in certain areas of study. Further research focused on exploring the challenges in implementing a flipped classroom is needed to be investigated.

52960   14:25-14:50 | Room 704 (7F)
Does Blended Learning System Boost Student's Knowledge Sharing in General Education Course? The Indonesian Higher Education Challenge
Dasim Budimansyah, Indonesia University of Education, Indonesia

The role of General Education is to equip students with basic knowledge, to understand the relationship between one science and another, to teach how to apply human knowledge and experience universally, so that it will enhance mutual understanding and respect for human beings. One of the challenges in General Education learning in higher education is to improve the ability of student's knowledge sharing. Knowledge sharing is usually not something normal, humans tend to hoard knowledge and perceive suspicious knowledge from others. In this context General Education course should strive to foster the habit of sharing knowledge in order to become the character of students as young intellectuals. The use of Blended Learning in General Education course will provide opportunities for students to share knowledge online. But the experience of using Blended Learning at Indonesia University of Education, online forums is nothing more than an empty framework because it is considered to have insufficient knowledge and is needed by students. This study seeks to find ways to improve the Online Knowledge Sharing Character (OKSC). In this paper we view that OKSC is influenced by intention factors, self-efficacy, social interaction, and technological satisfaction factors.

13:10-14:50 | Room 705 (7F)
Saturday Session III
Early Childhood Education
Session Chair: Garima Joshi

53359   13:10-13:35 | Room 705 (7F)
Educational Board Game in School: A meta-analysis and systematic review
Pin-Ju Chen, Ming Chuan University, Taiwan

The educational board game has drawn much attention lately in Taiwan. As a form of serious games, it is widely used in schools as a vehicle for gamification. Whereas previous reviews indicated that most relevant research have been done in last ten years, only a little research reported cumulative effect. This systematic review aims to summarize the cumulated findings of studies between 2009-2018. This study followed the review protocol suggested by Cochrane to ensure the reliability and validity. The best-evidence approach was used to identify and compare qualified studies, and synthesis their findings. The publication bias and heterogeneity were examined by Q-test, Forest plot and Funnel plot. The overall effect size was estimated in fixed and random models and the factors that influenced are discussed. Totally 23 studies met the criteria and were selected from 45 studies for analysis. The finding showed that the majority of the studies show positive effects of educational board game instruction on student achievement. It also was showed that current evidence is still limited to determine the key factors of success of educational board game instruction.

53623   13:35-14:00 | Room 705 (7F)
Boost Sight Reading Skills of Students Using Melodic Ostinato
Queeny Rose Ann Penaflorida, Assumption College, Philippines

This study aims to boost the sight-reading skills of the inexperienced grade six students through the use of melodic ostinato patterns as a strategy. Prior to the demonstration teaching, information about the current status of music education in the provincial setting was gathered and generated through field observations and interviews with the students and music teachers. It is noted that teachers who handle music classes are not really music major graduates. It serves as one factor why the application of musical concepts particularly in sight-reading was not given emphasis in the classroom teaching. Guided by Orff, Campbell and Scott-Kassner philosophy of sequential learning, a strategic framework that uses the melodic ostinato patterns with three phases: (1) rhythm patterns (2) melodic patterns (3) part-singing, was created as a guide in teaching sight-reading. There were individual and group skills tests and performance-based tests to assess the strength of the sight-reading skill acquisition of students. Findings indicated that sight-reading plays a significant role in the music classes. The students were able to read musical score through individualized and group interpretations. The findings showed that through simple melodic ostinato patterns used in this study can help develop the sight-reading skills of the students upon following the step by step procedure. Students were provided with the necessary materials to be able to understand and interpret music when they see it. Since melodic ostinato patterns are done repeatedly, it increases retention on students' note reading.

54517   14:00-14:25 | Room 705 (7F)
Creating Social Responsibility Among Children Through Illustrated Storybooks
Garima Joshi, Publicis Sapient, India

Modern living offers us resources and makes our life easy. Electricity is one such privilege we have. In a massive developing nation like India, we need to be judicial in the way we utilize our resources. Constant consumption raises a pressing need to rethink our ways of life. The first step towards a positive change is to acknowledge the fact that the problem exists. Along with this awareness, we need to change our habits and our mindsets, that make us believe that our individual efforts don't have sufficient momentum. Thus, to start a positive change we need to start sooner to sensitize children regarding the impact of consumption of resources around them and how their efforts matter in this big world. It's high time we evolve our bedtime stories. This illustrated book aims to inculcate a sense of social responsibility and confidence in one's positive actions. It revolves around a child's bizarre encounter with a whimsical character, who claims to call itself Elec aka Electricity. Electricity is personified as a character to give it tangible quality and emotion. The events make the kid observe and learn about electricity, its overconsumption and how to make a difference. He gets motivated to make little things right and be a superhero every day. Even if it means switching off one lamp while leaving the room. When it comes to resource conservation in this phase of overconsumption, it happens when we create lasting behavioral changes among individuals for common wellbeing.

53346   14:25-14:50 | Room 705 (7F)
Employing English Picturebooks in Classroom Teaching: Taking a Suburban Area in Mainland China as the Study Context
Jinglan Chen, Xiamen University, China

Nowadays, the application of English picturebook in childhood English education has generated more and more attention among Chinese researchers, educators, and parents. A growing number of them have started to employ English picturebook as a tool in childhood English education. However, research on the classroom use of English picturebooks for young Chinese children's English learning is still very much in its infancy, especially in suburban area of mainland China where parents are mainly from working class. This study aims to examine whether children's picturebooks are effective to young English learners' language growth in suburban area of China through the methods of action research. By integrating children picturebooks into English teaching, this study recruit 4 eight-year-old students who have not been formally learned English before. Findings indicate that by incorporating picturebooks with textbook in classroom teaching, students' English proficiency levels have been obviously improved. Reports from students, parents and teachers' comments demonstrate that this pedagogical innovation is accepted and beneficial. This paper also offers instructive implications for practitioners and other stakeholders in areas where educational resources are relatively scarce, collaborative effort should be devoted to promote increasing opportunity to get access to English picturebooks for EL students. In conclusion, English picturebooks are suitable for English language learners in the suburban area of China.

Saturday Session III

Policy

Session Chair: Daniel Jr. Saroca

54170   13:10-13:35 | Room 707 (7F)
"Stigma or Suporta?": A Phenomenology on Instructional Leadershift Practices
Bradley Goldie Loo, DepEd Division of San Juan, Philippines
Alejandro Ibanez, DepEd San Juan, Philippines
Marnelli Tolentino, DepEd San Juan, Philippines

Education delivery constantly changes and evolves, thus educational institutions and policymakers must ensure that they are able to catch up to these changes. Educational leadership plays a vital factor in ensuring and safeguarding the innovations and enhancements that are essential towards the change in the educational landscape. Educational leaders like, principals, education program supervisors as well as the key policymakers within the boundaries of the Department of education can foster and cultivate policies and changes that are much needed in order to make the teachers more equipped and more capable in delivering quality education towards their learners. The division of San Juan's Star Patrol Protocol ensures a formalized manner of looking into how the process of class observations were delivered by the school heads and the respective master teachers, the education program supervisors serve as the process observers of the STAR Patrol. Thru the Star Patrol Protocol, giving of key subject and content-specific technical assistance can be efficiently facilitated. This research made use of Qualitative method using the Descriptive Phenomenology design. Purposive sampling was used to determine the research informants. For the data treatment Colizzi's 7 step method was employed. Based on findings, two primary themes were formed namely: "Supporta ko, Guro ko" ("My support, My teacher"), and "A Starry Stigma".

54102   13:35-14:00 | Room 707 (7F)
Pakistan Higher Education System: Policies and Reforms
Irshad Ahmad Khan, Community Development Organization, Pakistan
Mukammil Shah, De Laas Gul, Pakistan

Education assumes an important job in the advancement and improvement of a state. Advancement of any nation relies on its proficiency rate and nature of instruction in that nation. In this way, it is the key needs of countries. Sadly, our own nation, Pakistan, is a regressive one with respect to its proficiency rate. Indeed, even numerous poor nations have higher education rate in contrast with Pakistan. Our policy framework and priority is in charge of this. Higher education has incredible significance in the improvement of a nation. Be that as it may, sadly, its significance is yet to be acknowledged in Asian nations. For over 70 years, Pakistan has been attempting to inspire their instructive standard by giving quality advanced education to their natives. Yet there are numerous deterrents and obstacles that are rising. These difficulties (amount, value, quality, and so on) are exceptionally normal in nature however require an appropriate methodology to address in the best way. The study explains major initiatives in higher education institutions in Pakistan according to experts, likewise investigates the job of Higher Education Commission (HEC) of Pakistan in presenting these changes. By utilizing subjective research technique, the examination embraces an illustrative research way to deal with present an all-encompassing perspective on the key change activities in HEIs both as far as substance and procedure. The study highlights the major issues, policies, challenges and reforms in higher education of Pakistan in the minds of University professors from public and private sectors.

53295   14:00-14:25 | Room 707 (7F)
Linkage Among Education Policies, Schooling Attainment, and Employment in the Philippines
Ma. Laarni Revilla, National Graduate Institute for Policy Studies (GRIPS), Japan
Jonna Estudillo, National Graduate Institute for Policy Studies (GRIPS), Japan

It is by now well-known that schooling is positively correlated to the probability of being employed. Yet the linkage among education policies, schooling attainment, and the probability of being employed largely remains unexplored in developing countries. The study investigates the relationship among education reforms, schooling, and employment in the Philippines using the regression discontinuity design (RDD). RDD could address the endogeneity problem if schooling is used as independent variable in the employment function. We exploit the timing of the free and subsidized secondary education policies in 1989 to create our instrumental variable on program exposure. Specifically, those who benefited from the policies are part of the treatment group, while those who did not benefit are part of the control group. We conduct our analysis using individual-level data from the 2008 and 2011 Annual Poverty Indicators Survey. We present three main findings. First, policy beneficiaries have significantly higher educational attainment (0.17 to 0.21 more years of schooling) denoting that the programs lowered the costs of schooling borne by parents. Second, schooling has no effect on the probability of being employed. This result may be explained by certain mechanisms, which include macroeconomic shocks, lack of well-targeted education programs, low labor demand, and poor schooling quality that lowers employment probability. Lastly, among employed individuals, additional schooling leads to higher income. Hence, the benefits of free and subsidized education in the Philippines can only be realized if an individual is employed. This study recommends a holistic approach in strengthening the education-labor market linkage.

53132   14:25-14:50 | Room 707 (7F)
Pedagogical Quality in Developing 21st Century Skills: Status and Policy Implications
Daniel Jr. Saroca, De La Salle Araneta University, Philippines

The Enhanced Basic Education Act of 2013 lengthened the ten-year Philippine basic education into twelve, wherein graduates are expected to be equipped with the skills that shall prepare them for either higher studies, employment or entrepreneurship. The study aimed to determine the status of the upper secondary Science, Technology, Engineering and Mathematics (STEM) pedagogical quality in developing 21st century skills and then utilize identified issues to draw implications for policy formulation. The study was conducted to ten teachers and 333 students, which underwent several iterative evaluation processes, both quantitative and qualitative. Quantitative data were obtained through survey questionnaires, self-reflection tools, documentary analysis guides and observation evaluation forms. Qualitative data were obtained from focused group discussions among students and teachers and interviews among administrators. Triangulation of results were able to determine the "good" status of the pedagogical quality in the development of 21st century skills among students. Four policy implications were derived from identified issues namely: the inclusion of 21st century skills development in the learning documents; the provision of high-quality learning facilitation through training; the establishment of an excellent learning environment; and the provision of effective learning processes.

Saturday Session IV

Assessment

Session Chair: Henrik Pallos

54389   15:05-15:30 | Room 601 (6F)

The Extent of Test-wiseness and the Level of Proficiency of the Education Students in St. Mary's College of Tagum Inc.

Gina Oracion, St. Mary's College of Tagum Inc., Philippines
Perla Padro, St. Mary's College of Tagum Inc., Philippines

The study focused primarily on the extent of test-wiseness and the level of proficiency of the third year education students of St. Mary's College of Tagum Inc., Tagum City. A descriptive-correlative method was used and the study utilized both the standardized and teachers-made questionnaires for the independent and dependent variables respectively. Appropriate statistical tools were employed in gathering the data needed. Universal sampling was utilized in determining the respondents who were all the incoming third-year Bachelor of Secondary Education students. The extent of students' test-wiseness had a mean percentile rating of 62% while the level of students' proficiency had a mean percentile rating of 55.10%. Based from the computation, the r-value of 0.544 indicates that the linear relationship between the extent of test-wiseness and the level of students' proficiency has a moderate positive linear correlation. The coefficient of determination of r2-0.2959 means that only 29.59% of the variation in the students' proficiency could be attributed to the variation in the students' test-wiseness. The rest (70.41%) is chance variation. This means that there is a significant relationship between the extent of test-wiseness and the level of proficiency among the third-year education students of St. Mary's College of Tagum Inc. The findings of the study provided essential and relevant data that can initiate relative changes especially in the field of testing and classroom assessment. Significant recommendations were offered to the different stakeholders in the academe with the hope that immediate and concurrent actions will be done in the light of the results and findings of the study.

54528   15:30-15:55 | Room 601 (6F)

Rasch Model Measurement Advantages for Assessing via Tests and Surveys: Independence and Interdependence of Parameter Estimations

Phillip Rowles, Tokyo University of Science, Japan

Rasch model measurement offers many advantages to educators conducting assessments using tests and surveys. The foundation stone of all useful and meaningful measurement is objectivity. Constructing measures by applying the Rasch model allows for 'specific objectivity'. Specific objectivity refers to when the comparing of persons is independent of the test or survey items administered. In parallel, it also refers to when the comparing of items is independent of which persons were administered the instrument. It does this by separating responses into two parameters: person ability measures and item difficulty calibrations. From these, parameter estimates may be calculated. Ordinal-level data in the form of raw scores can be transformed into interval-level data in the form of linear measures and calibrations. This mathematical transformation uses a natural logarithm to calculate success-to-failure odds in logarithm odds units (logits). After person measures and item calibrations have been constructed independently and checked for quality control, they are located either side of an incremental scale. At this stage, estimate interdependence may then be truly visualized and realized. Inferences may be made based on the differences between the locations of person ability measures and item difficulty calibrations. As the future is uncertain, Rasch model probabilistic measurement is a useful window into the future. These inferences are liberating and essential for educators who want to develop their assessment literacy skills for professional development. Therefore, the combination of both independent and interdependent parameter estimations is a crucial and profound tool for educational assessment success.

52850   15:55-16:20 | Room 601 (6F)

Innovative Alignment Among the Cornerstones of Teaching and Learning: Assessment, Curriculum, and Delivery in Multi-Campus Institutions

Nickie Christensen, Higher Colleges of Technology, United Arab Emirates
Mohamad Saoud, Higher Colleges of Technology, United Arab Emirates

Assessment should be a fundamental aspect of curriculum design and development that is intrinsic to teaching and learning, rather than a footnote. Indeed, alignment between assessment, curriculum, and instructional delivery is essential for effective educational outcomes. Such alignment is also a critical focus of higher educational accrediting bodies, both in initial and renewal accreditation. This presentation will describe the design and implementation of a triangulated alignment system at a multi-campus federal institute of higher education in the UAE. This system of alignment has two primary purposes: (1) to ensure coordination between these three integral areas for the benefit of faculty and students, and (2) to satisfy accreditation requirements for multi-campus delivery of equivalent educational experiences and achievement of identical learning outcomes. Alignment reflects the degree to which institutional expectations (curriculum), instructional delivery and student assessments correspond to guide student learning. In the context of this presentation, institutional expectations are reflected in program and course learning outcomes, an area of particular interest to accrediting bodies worldwide. The alignment system described in this session ensures that such learning outcomes are not merely words on paper, but are connected to classroom delivery and assessment systems. By following this approach, both equity and transparency are augmented at the student and program levels.

53248   16:20-16:45 | Room 601 (6F)

Implementation of Certainty/Confidence Based Marking (CBM) in Clinical Science Units at Central Queensland University, Australia

Henrik Pallos, Central Queensland University, Australia

In the clinical environment, it is important to be aware of gaps in knowledge as they may contribute to clinical errors, including misdiagnosis and underdiagnosis. While multiple choice question (MCQ) based assessments have high reliability, they cannot distinguish between one who knows the answer confidently from one who has guessed their answer. Though students may have obtained the same test score, their clinical performance can vary widely. In Certainty/Confidence Based Marking (CBM) quizzes, students are asked to rate their level of confidence in their answer. The final score is dependent on the combination of whether the answer is correct or incorrect and how confident students are in their answer. CBM allows a more accurate understanding of student performance, whether their responses are based on guessing or sound knowledge. From 2016, the clinical science units at Central Queensland University, Australia implemented CBM as one of the formative assessments in a conditional step-wise access to summative assessments in order to improve students' metacognitive skills. In my presentation, I will introduce CBM and its implementation in these clinical science units, the benefits and challenges.

15:05-16:45 | Room 603 (6F)
Saturday Session IV
Quality Assurance & Accountability
Session Chair: Phumelele Zakwe

53055   15:05-15:30 | Room 603 (6F)
Proposed Quality Assurance Mechanisms for School Development in the Unified Schools of the Archdiocese of Lipa (USAL)
Randy Baja, Sta. Teresa College, Philippines

Quality Assurance for school development is a process of monitoring, assessing, evaluating and reporting objectively based on agreed quality standards, all aspects of school life to ensure that acceptable standards are attained, maintained and improved upon continually. This study delved on the quality assurance practices in the Unified Schools of the Archdiocese of Lipa (USAL), Province of Batangas. It aimed at assessing the schools' performance on trust and shared accountability; opportunities to support innovation in schools; shared understanding and dialogue among stakeholders; network to support development; and developing a balanced view of school development. To achieve the fundamental purpose of this research, the descriptive method was utilized. The study made use of 10 schools with 100 respondents. One of the reasons for the slow development of and resistance to QA in school is that academics are, of course, trained to ask questions, to be skeptical, if not challenging. More and more, despite the reluctance of academics to accept the fact, students are becoming customers and will be looking for 'value for money'. In this context of international competition, quality assurance may well prove to be much more 'market orientated'. Quality Assurance processes and practices are dynamic and provide the needed guidance and support to schools for consistent improvement in learning outcomes. In this study, therefore, it is more important for an organization to be thinking actively and creatively about what it is trying to achieve, than to put its energy into complying with the standards of an external body.

54541   15:30-15:55 | Room 603 (6F)
Technology-supported Guidance to Increase Quality, Flexibility and Efficiency in Clinical Practice in Nursing Education
Jaroslav Zlamal, Lovisenberg Diaconal University College, Norway
Edith Roth Gjevjon, Lovisenberg Diaconal University College, Norway
Andrea Aparecida Goncalves Nes, Lovisenberg Diaconal University College, Norway

Clinical practice is one of the major components of nursing education. It makes up fifty percent of the total amount of study time and is a cooperative effort between educational and clinical institutions. This joint effort to educate and supervise nursing students is challenging. Communication among students, supervisors and teachers is often limited. The quality of supervision may vary according to each supervisor's attitude, amount of experience and clinical expertise. The proposed research project's aim is to test a guidance model supported by technology. Its goals are improving communication between related parties, allowing students to follow their study progression and enabling supervisors and teachers to provide better student support and follow-up. The guidance model is based on three main elements: electronic reports and feedback, virtual practice group meetings and digital assessment delivered by a smartphone/tablet app (under development). To examine the guidance model's effect, a randomized controlled trial will be performed among undergraduate nursing students, with critical thinking as the primary outcome and nursing competence as the secondary outcome. Critical thinking will be measured by the California Critical Thinking Skills Test (CCTST), and nursing competence will be measured by the Nurse Competence Scale (NCS).

52894   15:55-16:20 | Room 603 (6F)
Accountability Perception of School Leaders and Teachers on Students' Academic Performance: A Mixed Methods Study
Hebron Amos Bernabe, University of Santo Tomas, Philippines
Rodrigo Litao, University of Santo Tomas, Philippines

Accountability in education deals with the process of upholding school leaders (SL) and teachers accountable on students' academic performance (SAP). It has received considerable attention in educational leadership literature, however, little emphasis has been placed on accountability perception (AP) of SL and teachers on SAP. Thus, using the mixed methods approach, mainly purports to examine the relationship between the SAP and accountability perceptions of SL and teachers, and to describe the respondents' experiences regarding the phenomenon. Sixty SL and 172 teachers (n = 232) from K-12 private schools in Quezon City were purposively selected to answer the SLAPT and TAPT researchers-made questionnaires. Additionally, three SL and 11 teachers were recruited to undergo semi-structured interviews that enabled researchers to surface four interesting themes. Interestingly, a very high level of AP on SAP among respondents was revealed via mean scores and analysis of their articulations showed common insights that they are accountable on SAP, subordinates or leaders. But, results of Pearson's correlations indicated no significant relationship between the level of SAP and AP of (a) SL and (b) teachers. On the other hand, the correlation between the AP of SL and teachers demonstrated statistically significant relationship. On the whole, accountability of SL and teachers are evident, but the level of SAP appears to be predicted by other factors and is not necessarily dependent on respondents' AP. Moreover, clear accountability of SL to teachers enables teachers to become more accountable on their leaders and outcomes of instruction.

54116   16:20-16:45 | Room 603 (6F)
Reimagining the Provision of Quality Higher Education by Institutions in Durban Metropolitan Area, KwaZulu-Natal
Phumelele Zakwe, University of KwaZulu-Natal, South Africa

This paper examines the different typologies and understandings of the concept of quality, the factors that affect the provision of quality higher education, and the important quality of leadership and management that is required to strengthen and enhance this provision in tertiary institutions located in the Durban Metropolitan area of KwaZulu-Natal. The findings suggest that quality is complex and a serious challenge to higher education institutions. There are variations in the perceptions of what quality means and what constitutes leadership quality dimensions that could strengthen the provision of quality higher education in the institutions of higher education. There is a number of factors that impact on the provision of quality higher education, and these include: inadequacy of internal quality standards; limited understanding of the policies and procedures; lack or limited availability of financial resources; poor quality teaching materials; poor staffing; poor attitudes of students towards learning; non-conducive teaching and learning infrastructure; as well as poor inclusivity of vulnerable social groups in the society. The paper concludes that there is a need for a balance between the internal-external dichotomy of quality and its assurance in the institutions of higher education through strategies that would overcome the impediments to achieving quality outcomes.

15:05-16:45 | Room 604 (6F)
Saturday Session IV
Language Learning - Speaking
Session Chair: Shiao-Wei Chu

52040   15:05-15:30 | Room 604 (6F)
An Investigation on the Use of Utterance Verbs by Turkish ELT Majors: The Case of 'Say, Tell, Speak and Talk'
Revan Serpil, Anadolu University, Turkey

Synonym or near synonyms may have different denotational meanings, and these differences create variations in collocational or prosodic behaviors of the verbs (Xiao & McEnery, 2006). From a language learning perspective, acquiring these collocational or prosodic differences may form an important part of native-like competency. Therefore, this study focuses on Turkish L2 learners' receptive knowledge or target verb+noun collocations related to utterance verbs to test the differences between four words whose collocational or translation equivalents may change in Turkish. The participants of the study were 186 undergraduate learning majoring in English Language Department. 95 of these learners were the 1st and 91 of them were the 4th year students. For data collection, a colocation test with 12 multiple choice items was used. The data were analyzed via descriptive and inferential statistics as well as qualitative analysis. The results showed there was no statistical difference between the two groups of learners' receptive knowledge of the target items, yet the individual items showed differences. The analysis also revealed differences in learners' awareness of the target items.

54305   15:30-15:55 | Room 604 (6F)
Needs of Air Force Cadets in an English Speaking Course
Wanicha Siraranghom, Navaminda Kasatriyadhiraj Royal Air Force academy, Thailand

Abstract: This study investigated the needs of air force cadets in an English speaking course. The participants were 362 cadets of five classes (years 1-5). The instruments used to collect data in this study were questionnaires and a semi-structured interview. The results revealed that the cadets needed to study with a teacher who is less stressful and doesn't focus too much on scores and textbooks. They needed a teacher who can apply authentic materials to use in the classroom. They also need to learn English conversation in everyday life, speaking in military contexts, and speaking for presentation and for attending international conferences. The interview results demonstrated that the cadets needed to study with a good-natured teacher and provide equal chances for everyone to speak. Adequate time for practicing was also needed. Authentic materials were considered crucial by the cadets as they can draw the cadets' attention and make an English speaking class more interesting.

52883   15:55-16:20 | Room 604 (6F)
A Step-by-Step Approach to Fixing Fossilized Language Errors
Josh MacPherson, TST Prep, United States

Fossilized pronunciation and spoken grammar errors are a challenge for teachers to address and for students to improve on, especially independent learners at the intermediate and advanced levels. Individual language learners may even know the correct pronunciation and grammar, but can not produce it correctly in spontaneous speech. This is an even more serious dilemma for TOEFL takers who need to acquire a specific score in the speaking section of the exam. As the head instructor at TST Prep, a TOEFL-focused school, Josh MacPherson has had to confront the challenge of fixing fossilized mistakes, an aspect of language education some researchers deem impossible to change. After many iterations, the TST Prep team has designed a specific activity to help motivated language learners identify, isolate, and reduce their fossilized mistakes. This method has not been tested as a formalized research study, but instead in the class with independent students who need their TOEFL Speaking test score to improve in order to become a licensed pharmacist, nurse, or teacher in the US. The presentation will include testimonials from students and anecdotal observations, along with a guided walkthrough of how this activity works and why it helps reduce fossilized errors.

54431   16:20-16:45 | Room 604 (6F)
Let's Work it Out: Using Cooperative Learning to Build Speaking Fluency
Shiao-Wei Chu, National Chin-Yi University of Technology, Taiwan
Chad Eller, Providence University, Taiwan

Most English as a foreign language (EFL) learners in college, no matter how long they have learned English at schools, often find it challenging to develop and improve their oral communication proficiency in English because of the lack of authentic English speaking environments. Also, many studies indicated that in Asian countries the development of EFL students' English-speaking skill has often been neglected due to large class sizes, teacher-centered instruction, and exam-oriented teaching approaches. As a result, while speaking English, the majority of EFL students feel anxious and uncomfortable, worry about making mistakes, fear criticism or losing face, have poor thinking habits and low motivation to express themselves, and experience first-language interference. Cooperative learning addresses these challenges by giving students opportunities to work in groups to complete various assigned tasks and problems. The purpose of this study was to investigate cooperative learning as a strategy for raising EFL college students' self-confidence, motivation, and fluency while interacting in English. 25 Taiwanese university students participated in this study. At the end of the study, a questionnaire survey was conducted, and the final reflection documents were reviewed and analyzed. The results indicated that cooperative learning instruction during English speaking lessons created a significantly positive effect on both student-student interaction and student-teacher interaction. Participants viewed this learning process as an active and effective way to support them to share knowledge as well as boost self-confidence while speaking English. That is, in a cooperative learning environment, students became more interdependent, cooperative and autonomous language learners.

Saturday Session IV
Professional Development: School Staff

Session Chair: Ulysses Yu

53874   15:05-15:30 | Room 605 (6F)
Job Satisfaction and Employee Creativity and Innovation for Student Affairs Practitioners
Leandro Loyola, De La Salle University, Philippines

Student affairs and services play an important role in the success of educational institutions in carrying out students' holistic development and as a support to academics in order to facilitate learning. The student affairs administrators and practitioners contribute a lot in ensuring the delivery of dynamic programs and services that are responsive to the needs of the students. Because of this, the student affairs practitioners are expected to be creative and innovative in the field in order to provide and assure the quality of programs and services that addresses the ever-changing needs of their clientele. This paper examined the relationship of job satisfaction and employee innovation. The descriptive-correlational design was employed to describe the relationship between the variables. The data were collected using validated pre-existing survey instruments. The data gathered was analyzed using Chi-Square test of independence and Pearson product moment correlation. The methods confirmed that there is a strong relationship between the variables job satisfaction and employee creativity/innovation as perceived by the respondent student affairs practitioners at the Department of Student Life of the De La Salle-College of Saint Benilde.

53425   15:30-15:55 | Room 605 (6F)
Assessing Happiness in the Workplace at La Consolacion University Philippines
Enrico Rosales, La Consolacion University Philippines, Philippines

Happiness is defined as an emotional word used to summarize the quality of experiences in everyday life. This basically assess whether a person feels good through doing well and receiving recognition from work and other similar actions. It is perceived that happiness at work and positive relationships within a workplace generated three positive emotions such as enthusiasm, interest, and contentment. As such, studies proved that when a worker is happy, they become more effective in working towards common goal, thus increasing output by at least 12%. In this study, the level of happiness of the employee of La Consolacion University Philippines (LCUP) was investigated through survey analysis using the Oxford happiness scale. Results showed that out of 232 respondents 51.30% were pretty happy, followed by 28.02% who were considered to be very happy and 19.83% were satisfied in working in the University. In addition, this paper also discloses that compensation together with their nature of work and gender greatly affect the level of happiness of a certain individual. This study could serve as a basis to the administration to further nurture their employees by reinforcing and valuing the role of the individual through rewards or incentives in order to boost their productivity generating a good and happy workplace environment.

53395   15:55-16:20 | Room 605 (6F)
Improving Employee Retention Strategies in the Institutions of Higher Education in Durban Metropolitan Area
Phumelele Zakwe, University of KwaZulu-Natal, South Africa

This paper draws from a study that examines the importance of employee retention in the Institutions of Higher education in Durban Metropolitan Area. The study further investigates significances for improving employee retention strategies in the Institutions of Higher education in Durban Metropolitan Area. A phenomenological research design was employed. Critical research questions were: Why is employee retention important in the institutions of higher education? What are the factors that affect employee retention in the institutions of higher education? What are the strategies for employee retention in the institutions of higher education in the Durban Metropolitan Area? In-depth interviews were conducted with Deans, Operations Managers and Employees in higher education institutions in Durban Metro which includes University of KwaZulu-Natal, Mangosuthu University of Technology and Durban University of Technology. The preliminary findings of the study suggest that employee retention is a major challenge faced by the employees in retaining the hired employees in its organization. Employees are the most dynamic resources of an organization. Employees' significance to organizations calls for not only the need to attract the best talents but also the necessity to retain them for a long term. The biggest challenge that organizations are facing today is not only managing these resources but also retaining them. The study recommends that Universities today should take great care in retaining its valuable employees and university leaders should effectively implement employee retention strategies. The paper concludes that managing and retaining employees' is an important fundamental aspect of achieving competitive advantage among the organizations.

53738   16:20-16:45 | Room 605 (6F)
Teachers' Job Satisfaction in Relation to Teaching Performances and Pupils' Academic Achievement
Ulysses Yu, Philippine Normal University and St. Stephen's High School, Philippines
Felina Young, College of Holy Spirit, Philippines

 – Statement of the Problem: Teacher Job Satisfaction has a positive impact that promotes better teaching quality and high education quality. And it is not merely due to monetary considerations, but to other motivational factors. The purpose of this study was to conduct an in-depth study of the teacher's level of job satisfaction in the selected variables. More specifically, to answer the following: 1. What is the Teachers' Level of Satisfaction in terms of salary, fringe benefits, organizational climate, working environment, and career advancement; 2. What is the Teacher's Level of Performance Ratings? 3. What is the Pupils' Level of Academic Achievement 4. What recommendations can help increase the level of job satisfaction of the teachers? – Methodology: To answer these problems, questionnaire were distributed to 19 Grade IV teachers. Furthermore, 831 Pupils' Academic Achievement were evaluated. To identify the level of job satisfaction, the weighted mean was computed. To determine the differences in the ranking, Kruskal Wallis Analysis of Variance was used. To determine the relationship between teacher's performance rating and job satisfaction and that of Pupils' Academic Achievement, Pearson Correlation were used. – Summary of Findings: 1. For Level of Teachers' Job Satisfaction, respondents were most satisfied with fringe benefits; 2. Most respondents got the mark of Satisfactory for level of performance ratings; 3. For the level of pupils' academic achievement, predominantly got Satisfactory;

Saturday Session IV

Education Policy: Operating Educational Institutions

Session Chair: Hsuan-Fu Ho

54233   15:05-15:30 | Room 607 (6F)
Customer Relationship Management in an Educational Institution in the Philippines
Helen Rigor, St. Paul University Quezon City, Philippines
Antoniette Lacerna, St. Paul University Quezon City, Philippines
Marie Antonette Ocampo, St. Paul University Quezon City, Philippines

Customer Relationship Management is the process of carefully managing detailed information about individual customers and all customer "touch points" to maximize loyalty. A touch point is any occasion on which a customer encounters the brand and product- from actual experience to personal or mass communication to casual observation (Anabila & Awunyo-Vitor, 2013). Universities and colleges provide education service which requires high customer contact with all the sensitivities that go with it. Marketing in general refers to the concept of choosing the target market and get, keep and grow customer through creating, delivering, and communicating customer value (Kotler, 2012). It is further stated that attracting a new customer is 5 times costlier than pleasing an existing one. Customer retention is more important than customer attraction. In satisfying customer needs, service performance must be able to attain, or better, exceed the customer expectations. This condition is requisite in building customer loyalty—that is patronizing or "staying in" the school and up to the future in whatever circumstances. This study is undertaken to determine the current status of the customer relationship management practices of a Philippine Catholic Higher Education University and its impact on student and parent satisfaction and retention. Primary respondents are the Junior, Senior High School and college students of the University for academic year 2019-2020 and their parents. Recommendations on customer service, marketing, and internal processes are given to address the gap between customer expectations and customers' actual experience.

52196   15:30-15:55 | Room 607 (6F)
Boarding College Strategy Management in College of Theology Sangkakala Kopeng, District Getasan
Noveliza Tepy, Pelita Harapan University, Indonesia

The objectives of this research were to: (1) Determine and analyze the boarding management strategies that have been used by Sekolah Tinggi Theologi (College Of Theology) Sangkakala; (2) to analyze the root problems in the management of a boarding college in Sekolah Tinggi Theologi (College Of Theology) Sangkakala; (3) Design and produce strategies that can be implemented by Sekolah Tinggi Theologi (College Of Theology) Sangkakala in the management of a boarding high school. Design of this research is the development, but in this study is limited to the fifth stage, namely the revision of product design, where the product that produced a strategic plan for the management of the boarding college at Sekolah Tinggi Theologi (College Of Theology) Sangkakala Kopeng. Data analysis technique used is the analysis of fishbone. Data collection techniques are observation, interviews, document studies, and FGD. Meanwhile, data validation was done by using tianggulasi source. The results of this analysis, a strategy that is based on the analysis fishbone, includes four factors: (1) curriculum management strategies and coaching; (2) management strategies of learners; (3) management strategies educators; and (4) strategies in the policy leader. Furthermore, the foundations, the chairman (rector), lecturers and other staff are expected to optimize the implementation of the strategic plan that has been prepared.

53001   15:55-16:20 | Room 607 (6F)
The Impact of Landmark Court Cases on Funding in American Public Education Systems: Law and the Financial Structure of Educational Institutions
Nathaniel Edwards, Yamaguchi National University, Japan

Court rulings and legal precedents can significantly influence educational policy, the fundamental financial structure of public schools, and the educational funding process at the local, regional, and national levels of education systems. Landmark court cases involving different stakeholders, employing various administrative concepts and a wide range of legal strategies, have had a significant impact on contemporary educational funding methods and on the creation of educational programs and new types of schools (Odden & Picus, 2004). This presentation examines the close interdependence of the legal and education systems and the outcomes of five landmark court cases which continue to influence current legislation at the local, state, and national levels of education. Student performance and learning outcomes related to funding, the trend towards privatization in education, and the planning of financial models which are appropriate to the contemporary needs and requirements of diverse student populations and American schools are also addressed. Despite increases in the total amount of funding for education in the United States and new legislation designed to address and correct educational funding imbalances, some differences continue to exist in local and state funding for education (Coon, 1999). Differences in funding between some school districts and systems persist despite decades of discussion, research, and various legal strategies and challenges in the legal system.

53941   16:20-16:45 | Room 607 (6F)
Development of a Rational Compensation System for School Directors in Taiwan
Hsuan-Fu Ho, National Chiayi University, Taiwan

School directors play an extremely essential role of assisting the principal to effectively carrying out school missions. In Taiwan, school principals select their directors from a pool of teachers who are willing to assume the director positions. Nevertheless, school teachers are lacking motivations to become directors in the preceding years because the burden and stress of school directors has rapidly accelerated without commensurate compensations. The newest pension system initiated by the Taiwan government in 2019 has further deteriorated this situation, and the shabby monthly pay of school directors is only approximately 65 dollars higher than their homeroom teacher counterparts, resulting in a dramatic shrink of the already meager school director candidate pool. Many principals lamented and argued that they cannot find enough teachers to assume the school director positions for the coming school year, and it is crucial for the government to immediately revamp the school educator compensation system. Sponsored by the Ministry of Science and Technology of Taiwan, this research is aiming to develop a comprehensive compensation system for school directors that take into account of the following compensation concerns: political feasibility, economic feasibility, social feasibility, and technical feasibility. In this presentation, we will first identify the rationales of a sound school director compensation system; thereafter, we will compare the school director (administrator) compensation systems among major countries in the world; and finally, we are going to discuss what policies and tasks should be undertaken to improve the current school director compensation system in Taiwan.

15:05-16:45 | Room 608 (6F)
Saturday Session IV
Science Education
Session Chair: Wilson Wen Bin Goh

52927   15:05-15:30 | Room 608 (6F)
Process-Oriented Guided Inquiry Lessons in Grade 10 Biology
Ma. Sharlyn Navia, Bicol University Graduate School, Philippines

This descriptive developmental study determined the effect of Process-Oriented Guided Inquiry Lessons in Biology to the Grade 10 students' performance. It focused on the developed Process-Oriented Guided Inquiry Lessons, jurors' evaluation of the Process-Oriented Guided Inquiry Lessons in terms of competency-based, process skills involved, inquiry-based and cooperative learning strategy, and its effect on students' conceptual understanding, process skills and metacognitive awareness. The respondents were Grade 10 students of Taysan Resettlement Integrated School, Legazpi City, SY 2018-2019. The researcher employed a pre-experimental research design particularly a pretest-posttest design. Both qualitative and quantitative methods were utilized in analyzing the results in the lesson implementation. The qualitative data were obtained from the students' journals and remarks of the teacher-observers in the affective process skills observation sheets. In the quantitative method, data were obtained from the jurors' evaluation on the developed Process-Oriented Guided Inquiry Lessons for Grade 10 Biology, pretest and posttest scores and the students' response in the metacognitive awareness inventory. Mean gain and t-test were used for statistical rigors. Results show that the six Process-Oriented Guided Inquiry Lessons were deemed excellent by the jurors. This means that the jurors were convinced that developed Process-Oriented Guided Inquiry Lessons were of high quality and the four features were evident and commendable in the developed lessons. There were improvements in the conceptual understanding, process skills and metacognitive awareness of students supported by positive mean gain scores and the positive remarks given by the teacher-observers on student's affective process skills during the conduct of the study.

54228   15:30-15:55 | Room 608 (6F)
Possibilities of Liberal Arts and STEAM Education
Aki Yamada, Tamagawa University, Japan

The modern era has presented rapid technological advances in areas such as communication, Information Technology, and Artificial Intelligence, which have become heavily integrated into society and our conception of everyday life. With this in mind, visions for the development of STEM education and technologically proficient workforces are being prioritized by governments and educational institutions world-wide. Increasing interdisciplinary study and a STEAM approach of re-integrating aspects of the arts and sciences, can help overcome divisions between academic disciplines and restore the integrated nature of scholarship. The Japanese government envisions the next societal revolution as Society 5.0, an era where advanced technologies and service platforms integrate with and empower individuals in a human-based society. This paper will explain how STEAM education is implemented in Japan its relationship to the Cabinet Office of Japan's vision for Society 5.0, and the challenges and next steps for STEAM education. This research is guided by evidence from interviews with faculty and students in the STEAM programs in Japan, used to gather the firsthand experiences of working in the intersection between technical engineering fields and the arts. Specifically, three key points will be examined: 1) The effects and value of interdisciplinary education, 2) Important program and curriculum considerations in STEAM education 3)The challenges of implementing effective STEAM education. Through these findings, this paper will provide a foundation to understand where Japan currently stands in regard to interdisciplinary STEAM education, the effects and value of liberal arts education, and how Japan can continue to prepare for the Society 5.0 era.

53339   15:55-16:20 | Room 608 (6F)
Changes in Teachers' Understandings of STEM Education in the Kingdom of Saudi Arabia
Kathy Smith, Monash University, Australia
Greg Lancaster, Monash University, Australia
Lucas Johnson, Monash University, Australia

In 2016, the Kingdom of Saudi Arabia (KSA) developed a bold 'Vision 2030' plan that seeks to establish a strong foundation for future economic prosperity based on a transformational shift from the current natural resource-based economy to a knowledge economy (Wiseman, Abdelfattah and Almassaad, 2016). In addressing these reforms, the KSA Ministry of Education has engaged a number of global universities to design and implement teacher professional learning for KSA educators to build new knowledge and skills needed to innovate the traditional curriculum. The Faculty of Education, Monash University, is currently engaged in this initiative, providing a 44 week program exploring technologies and pedagogies of STEM education and the implications for KSA schools. The cohort of 25 technology, mathematics and science Saudi educators will experience many STEM Learning opportunities, including 17 weeks immersion in STEM education classes in Australian schools. The program is intended to positively impact teacher professional growth, evidenced by a change in participant thinking about understandings of STEM education. The intensive nature and duration of the professional learning program presents a unique opportunity to map changes in thinking. This research seeks to capture such change using a mixed methods approach (anonymous surveys and regular focus group meetings). Of particular interest are the development of personal confidence with STEM teaching and the changing understanding of the interdisciplinary nature of the subject. Initial survey data reveals the vast majority of the KSA educators report a limited understanding of STEM education and low levels of self-confidence in teaching STEM classes.

53639   16:20-16:45 | Room 608 (6F)
Give Swirl a Whirl: A Mixed-method Analysis on Swirl Approach to Teach Applied Statistics in a Biology Student Cohort
Wilson Wen Bin Goh, Nanyang Technological University, Singapore
Felicia Ngan, Nanyang Technological University, Singapore
Chun Chau Sze, Nanyang Technological University, Singapore

To equip biology students with data literacy skills, this study investigates the utility of retooling the electronic programming tutorial system, Swirl for teaching applied statistics in a cohort of biology students in a 2-phased study: Phase 1 involved administration of tutorial-based course, pretest-posttest assessment and preliminary survey, while Phase 2 involved post-hoc survey and learning style analysis. The base teaching material, in both Swirl and paper-based forms received positive content evaluation amongst students and improved students' learning outcomes with significant learning gains and large effect sizes. While there is no evidence of greater learning gains in Swirl against the paper version, it does offer better palatability through its interactive and integrated programmatic components. We see Swirl's key value in early immersion of students in a formal programmatic environment while learning applied statistical theory simultaneously, and believe that this is essential for efficiently bridging practice-theory gaps for aspiring bio-data scientists.

15:05-16:45 | Room 609 (6F)
Saturday Session IV
Student Autonomy
Session Chair: Nic Nistor

53074   15:05-15:30 | Room 609 (6F)
A Priming Experiment on the Effects of Letter Grades and Autonomy-support on Academic Motivation
Mai Yasue, Quest University Canada, Canada
I-Chant A. Chiang, Simon Fraser University, Canada
Kelsey Chamberlin, Independent Researcher, Canada

Here we used a survey-based priming experiment to explore the psychological effects of letter grades (ie. A, B, C to F) and autonomy-supportive teaching practices (eg. giving opportunities for choices, building trust between student and teacher). Much research in educational psychology has suggested that extrinsic motivators such as grades can "crowd-out" or thwart autonomous academic motivation and increase controlled academic motivation. In contrast, empirical research in Self-Determination Theory has suggested that autonomy-supportive teachers can enhance autonomous academic motivation and reduce controlled academic motivation. Thus we hypothesized that priming autonomy-support would reduce or buffer the adverse effect of grades on autonomous academic motivation. 392 participants at three universities were randomly sorted into three different study conditions (no-prime, grading prime, grading and autonomy-support prime). In the grading prime, students were asked questions about their grade point averages whereas in the autonomy-support prime students were asked items about autonomy-supportive teachers. Contrary to our predictions, priming students to think about grades had no effects on autonomous or controlled academic motivation. Furthermore, at one of the universities, priming students to think about autonomy-supportive teachers increased controlled academic motivation. The results of this study suggest that in at least one particular context, enhancing the salience of autonomy-supportive pedagogical techniques used by teachers can inadvertently create additional extrinsic social pressures on students. The results of this study point to the need to conduct more multi-institutional research on academic motivation to enhance understanding of the wide array of pedagogical factors that may affect academic motivation.

53635   15:30-15:55 | Room 609 (6F)
PS2CLH: A Learning Factor Model for Enhancing Students' Ability to Control Their Achievement
Arlindo Almada, London Metropolitan University, United Kingdom
Qicheng Yu, London Metropolitan University, United Kingdom
Preeti Patel, London Metropolitan University, United Kingdom

Numerous factors that influence students' academic performance involve issues beyond the individuals' control, such as national policies, government initiatives and university resources among many others. Even if students are aware of these factors, addressing them may be unfeasible. Identifying causes within students' control could both improve students' understanding of these factors as well as enabling students to independently deal with related issues. This paper proposes a student-controllable learning factor model that combines the perspectives of Psychology, Self-responsibility, Sociology, Communication, Learning and Health & wellbeing (PS2CLH). The proposed model used qualitative methods to identify underlying aspects affecting academic achievement and selected controllable factors. This research reports on the outcomes of the employment of the PS2CLH model to predict student performance. Initially, data is collected through a self-evaluative web-based questionnaire. Each student's past performance and factors affecting this are then quantified. This study reveals the impact of students' controllable factors on student achievement. The PS2CLH model test results indicated 94% accuracy of successful prediction of the student performance based on the proposed PS2CLH model. The importance of "establishing and achieving personal goals" was higher than "stress", "learning room" and "grammar and vocabulary" among other factors. This research raised participant students' awareness of PS2CLH perspectives, which helped them manage factors affecting academic performance more effectively. Consequently, most of the students have enhanced their academic performance by addressing these critical factors. However, due to the limitations of the current sample data, the PS2CLH model will be further monitored for various applications.

54558   15:55-16:20 | Room 609 (6F)
What Affects Learning Outcomes of Thai Students?
Dollaya Hirunyasiri, Sodsri-Saritwong Foundation, Thailand
Pinanong Hakard, Sodsri-Saridwongso Foundation, Thailand
Kongkiat Kespechara, Sodsri-Saritwong Foundation, Thailand
Suphanut Thattinaphanich, Sodsri-Saritwong Foundation, Thailand
Somying Saithanu, Sodsri-Saritwong Foundation, Thailand
Chonlada Sittitoon, Sodsri-Saritwong Foundation, Thailand
Apansarin Kanarat, Sodsri-Saritwong Foundation, Thailand

Based on the 70-20-10 Model of Learning and Development (70% of learning comes from experiences, 20% from social interactions and 10% from formal education) this paper examines how formal education affects Thai primary school students' learning skills, specifically reading, thinking and writing. Data from Q-info (quality learning information system, collecting data from 45 schools in 6 provinces in Thailand) shows that the school size affects Read Think Write scores (Read Think Write, the annual national Thai standardized assessment exam). For example, most students from medium-sized schools received below-average exam scores; while most students from large-sized schools achieved above-average exam scores. However, when adding a factor of "amount of frontal classroom hours", we found it had little correlation with students' RTW scores. For example, students from large-sized schools with low classroom hours could outcompete students from large-sized schools with higher classroom hours. Or students from medium-sized schools with higher classroom hours received lower scores compared to students from large-sized schools with lower classroom hours. Therefore, what affects large-sized schools to outperform medium-sized schools is not the amount of frontal classroom hours. In conclusion, the amount of frontal (lecture-based) school hours is not the key factor for improving primary school students' RTW skills. Therefore, other learning styles such as interactions with others and hands-on experiences should be considered.

51529   16:20-16:45 | Room 609 (6F)
Undergraduate Students' Self-directed Learning with Video Lecture Records
Nic Nistor, Ludwig-Maximilians-Universität München, Germany

For university students, coordinating study with earning money to support the study, and with private life is often a challenge. Video records of the lectures they need to attend provide students with a certain autonomy. However, their interdependence with educational technology requires specific self-directed learning (SDL) skills and learning strategies. This study was framed by the SDL concept, focusing on primary, control and supporting learning strategies, aiming to understand how students of a large German university use video lecture records for SDL and which learning strategies they apply. Interviews with undergraduate students of Educational Sciences revealed that video records were used to complement or to replace face-to-face lectures. Most frequently, students used a simple primary strategy, i.e., listening to the lectures and looking at the presentation in the same way as they would in the lecture hall. Few students used supporting strategies such as actively avoiding disturbances. Control strategies and more effective primary strategies (e.g., extracting essential information items and individually or collaboratively clarifying the relationships between them) were hardly used. There was no indication of collaborative SDL. In conclusion, few participants learned with video lecture records efficiently; providing students with a video lecture library and specialized technology was not sufficient. The interviews suggest that, and how, learning strategy training may help. For educational practice, an online training concept is proposed, including students' self-observation and reflection on their applied learning strategies. Consequently, students should be able to choose strategies to more efficiently harness the educational technology potential.

15:05-16:45 | Room 703 (7F)
Saturday Session IV
International Education

Session Chair: Bruce Berryman

53277   15:05-15:30 | Room 703 (7F)
Brokers Behind International University Admission: An Investigation on the Role of Private Admission Agents in China
Siyuan Feng, The University of Hong Kong, Hong Kong

International student mobility represents a fast-growing component of contemporary international tertiary education. Current literature has approached the research topic from diverse perspectives such as global academic movement, internationalisation of the curriculum, and campus diversity. However, the surge in international student mobility is not purely an educational phenomenon, and it also indicates a lucrative global market in exporting higher education as a merchantable service. Behind the booming market for international higher education, one phenomenon that raised the research attention in this study regards the use of private education agents in international admissions and beyond. Despite education agents' significant roles in facilitating international student mobility, insufficient research has been done in the literature to reveal the pattern and implications of education agents' roles in the host countries. This qualitative study studied education agents' roles in Chinese students' admissions to international universities as well as their educational and social implications. Building on data collected through multiple qualitative methods, the study focused on education agents' relationship with international higher education institutes and their approaches to assist students in admission. The analysis of this study also examined the implications of these characteristics have for equity and social justice within international higher education. Findings suggested that educational agents had significant influences on students' decisions in their application to international universities. The study also revealed hidden monetary connections between the agents and universities that indicated a possible conflict of interest in international higher education. The study also makes a few policy recommendations based on its findings.

53603   15:30-15:55 | Room 703 (7F)
Adoption of Innovative Learning Management System for Quality Assurance of Educational Programs Delivered Transnationally
Vinh Tran, UTS Insearch, Australia

The rise of transnational delivery of education programs, while providing numerous benefits to students, parents and institutions, has posed significant challenges as to how the quality of such programs are assured in terms of learning outcomes, curriculum content, assessment & instruction. The inherently complex nature of education experiences is amplified by the sophiscated and diverse environments where the programs are offered, academically and culturally. This presentation looks at the innovative use of a modern Learning Management System (LMS) to deliver an excellent student experience in these transnationally delivered educational programs where they are guaranteed to benefit from an international curriculum with opportunities for localised contents and experiences. The LMS also acts as an excellent medium of communication and collaboration between teaching staff across countries, facilitating sharing of best learning and teaching practices and greatly enhancing the instruction and moderation process, a cornerstone of any successful transnational programs. Real time analytics generated from the LMS about all aspects of the student online activities allows transparent and timely information about student progress in the programs, informing teaching staff of the appropriateness of their curriculum for the countries where the programs are offered and for the in-country providers to tailor their in-class activities and student support initiatives for the students in those programs. High level information is also available to academic managers and school administrators for effective oversight of the delivery of the programs and make informed decisions accordingly.

53513   15:55-16:20 | Room 703 (7F)
Internationalization of Higher Education: Changes, Changes and More Changes
John Hope, University of Auckland, New Zealand

The traditional face of the internationalization of higher education has been semester abroad movement, only limited by the cost. New threats such as terrorism, excessive nationalism and political issues have changed the face of internationalization. Internationalization at Home was a change suggested as a cost-free and safe replacement for travel abroad but has not replaced semester abroad internationalization. Full degree study in a foreign country, usually by a student from a less developed country travelling to a well-developed country, has also changed. Now previous source countries such as Malaysia and China have become destination countries for students from less well-developed countries. Social media ubiquity is another change. New forms of communication make virtual study of a degree in a foreign country possible and has opened the door to big business. Most recently, a further change is occurring where serious questions have been asked about the very nature of internationalization. It has been suggested that the internationalization of higher education has not been encouraged for the higher good, but for the high tuition fees paid by international students. A further recent change has been the notion that the internationalization of higher education has been the 21st century form of colonization, where developed countries impose their knowledge and culture on less developed countries. What change is next? This paper will create opportunities to learn from the past and speculate about the repurposing of higher education in an uncertain future.

54090   16:20-16:45 | Room 703 (7F)
Achieving Equivalence in Transnational Education: A Case Study in Crossing Complex Boundaries in Interdisciplinary Studies
Bruce Berryman, RMIT University, Australia

Transnational Education has been growing at an exponential rate over recent years with universities extending their global reach through approaches ranging from partnerships to offshore campus arrangements. While the demand for TNE is expected to continue to develop, experience suggests that the opportunities offered by the globalization of higher education are counterbalanced by a number of challenges. One such challenge is the ability to deliver equivalent student outcomes in diverse cultural and contextual contexts. While streamlined approaches to curriculum delivery and compliance may mitigate institutional risk in some disciplines (e.g. business), other niche areas of study such as Media and Communications require more nuanced approaches. This paper is based on the experience of RMIT University and its interdisciplinary media and communication degree program, Professional Communication. First launched in 1992, the program is currently delivered at four sites in the Asia Pacific region: Melbourne, Ho Chi Minh City, Hanoi and Singapore. Using a retrospective case study approach, the paper explores how location (culture) and institutional relationships (context) impact on the TNE experience. More specifically, it identifies key challenges to successful TNE program development and delivery, as well as a series of enablers to navigating program complexity, including collaborative processes of program development, course design and equivalence, which improve both the staff and student experience.

Saturday Session IV
Lifelong & Online Education

Session Chair: Rahmat Budiman

54761   15:05-15:30 | Room 704 (7F)
Cultural Diversity and Lifelong Learning
Olga Bombardelli, University Trento, Italy

This contribution deals with the role of lifelong learning for common development, focussing on the need of cultural diversity against mass homogenization for a sustainable future, rethinking open society. Lifelong learning is a big contribution for the improvement of competencies for personal, professional, and civic purposes in an interdependent world. Formal and informal learning are a changing factor, and that's why we need to accept, and support cultural diversity, despite the global influence of the mass media and the risk of 'unique thinking' . This text is organized in three parts: the challenges of our era in an interdependent world, and sustainable development as coping measure, the potential role of citizens for influencing decisions in a democratic societies in the internet era, the importance of cultural diversity for enhancing responsible civic behaviour of both individuals and groups or organizations, in order to foster human development for a sustainable future, and to improve public decision making. It implies an open minded and pluralistic education, empowering for participation and responsibility.

53428   15:30-15:55 | Room 704 (7F)
Participation Factors of Education Service Officer's in Lifelong Learning
Rosezelenda Abdul Rahman, University Malaya, Malaysia
Ahmad Zabidi Abdul Razak, University of Malaya, Malaysia

The study was conducted to identify factors that encourage and hinder the participation of education service officer's in lifelong learning. A total of 400 teachers was involved as respondents in this study. The study was a quantitative research that uses the survey method. Data were collected through feedback from the respondents using questionnaire. Quantitative data were analysed using the Statistical Package for Social Sciences (SPSS) software version 24.0. The results show that the overall encouragement factors that encourage participation of teachers in lifelong learning (LLL) are at high level. Whereas the barrier factors that obstructive teacher participation in LLL are at the moderate level. This study can provide information to training centre and institution to plan appropriate course and training that fulfil the need of the teacher. Meanwhile teacher and school administration can take account the barrier factors that hinder the teacher participation in LLL. In the same time, education service officers can plan their own learning using the information given. The final analysis revealed all 31 items are suitable to measure the encouragement and barrier of participation in lifelong learning. The Results of the pilot study showed that the instrument were very good reliability (α-0.933).

54316   15:55-16:20 | Room 704 (7F)
Credit Counting to Lifelong Learning – Fostering an Independent Learner Culture Through the Transformation of Assessment Practices
Chloe Humphreys, Otago Polytechnic, New Zealand

Since its establishment in 2011, the Bachelor of Culinary Arts (BCA) programme at Otago Polytechnic has used design as pedagogy, with project based learning as the key medium for assessment. Despite the lack of formal examinations, over recent years the degree has seen a major increase in assessment anxiety, with students focused primarily on how to get the desired grade rather than engaging in learning for learning's sake. A deeply ingrained desire to be spoon-fed 'the answers' is directly at odds with the culture of the BCA, which values critical thinking and student autonomy. The increasing 'assessment obsession' among school leavers and students previously engaged in tertiary education seems to highlight a key problem with what Sadler identifies as "the strong trend towards fine grained prescription, atomised assessment, [and] the accumulation of little 'credits' like grains of sand…" (Sadler, 2007, p. 392). Such observations have engendered a re-evaluation of assessment practices within the programme, in order to place learning back at the centre. This paper will examine the evolution of assessment practices within Year 1 of the BCA. By going back to Biggs' concept of constructive alignment, the programme aims to reconceive assessment criteria as 'learning criteria', with a focus on collecting bodies of evidence rather than prescriptive assessment tasks.

54455   16:20-16:45 | Room 704 (7F)
Empowering Students through Tutor's Feedback in Online Learning
Rahmat Budiman, Universitas Terbuka, Indonesia

Online learning students may encounter adjustment difficulties particularly in the early semesters. Students with lack of computer literacy and related educational background might result in withdrawal from the course of study prematurely. The current research was carried out to investigate tutor's feedback as a means to empower online learning students, including to build autonomy, help-seeking initiatives, and connectivity. The qualitative descriptive analysis was conducted on 135 students' comments given in three different online classes. Data was collected by a set of open-ended questions provided at the end of the online tutorial sessions. Data analysis adopted thematic analysis. Three main themes were identified, including independent learning, connectivity, and help-seeking initiatives. Meanwhile, an emerging theme was identified, namely solitary learning styles. The findings indicate that tutor's feedback played an important role in empowering students. Individual feedback helped students understand independent learning more comprehensively, build connectivity with tutor and institution, and find possible solutions for each problem they met. Students with solitary learning styles, however, preferred feedback that pointed out the weaknesses or inappropriate answers they submitted. In addition, they showed lack interest in other feedback given by the tutor.

15:05-16:45 | Room 705 (7F)
Saturday Session IV
Innovations in Learning & Teaching
Session Chair: Md Shah Moazzem Hossain

53324   15:05-15:30 | Room 705 (7F)
Of Makers and Spaces: Learning Ecosystems for Innovation in a Singaporean School
Johnny Wee, Ping Yi Secondary School, Singapore
Kok Ping Tan, National University of Singapore, Singapore

The project seeks to study the pedagogical, practical and social implications of implementing a Design & Technology (D&T) common curriculum infused with Makerspace principles to nurture students' creativity and innovation in Ping Yi Secondary School, Singapore. As a subject, D&T guides students through design-and-make projects through the design process, which lends itself well to the integration of Makerspace principles, namely - tinkering, playing, experimenting, expressing, iterating and collaborating, using new digital tools to make, share and learn. The scope and requirements of each project can range from individual works to large-scale group-based projects, which provide multiple holistic opportunities for independent learning, as well as interdependent social interactions between common curriculum students that may differ widely in attitude and aptitude. The study will focus on the ideas, considerations, and compromises made over the course of the project, and attempts to measure its impact on students in the form of attitudes, academic learning, personal empowerment and disposition towards innovation. Taken together, the study suggests that integrating Makerspace into the school curriculum can lead to positive changes for students in both academic learning and disposition towards innovation.

54331   15:30-15:55 | Room 705 (7F)
QORI Learning Model to Foster Learning Autonomy
Erik Wahyu Zaenal Qori, Indonesia University of Education, Indonesia

The awareness of rural communities in the province of West Java, Indonesia to further their education to a higher level remains low. In general, most teenagers only go to junior high school; only a small proportion continue to high school. Those who have graduated from junior high school generally look for work in big cities, making the high school gross enrollment ratio (GER) in the province of West Java surprisingly low. To circumvent this issue, the Government of West Java Province has since 2017 offered free Open High School in parent schools in each sub-district. It is hoped that such an initiative will enable children to learn independently. Ideally, good learning autonomy allows children to develop optimally. In reality, however, the student learning independence in Open High School is very low. Among the numerous contributing factors are the learning environment in school that is less conducive and the use of monotonous learning models. This study adopted the QORI (Quantum, cOllaboRative and Independent) model as an alternative learning model through an R&D design. Findings reveal that the QORI model had an impact on enhancing learning autonomy constructed from the stages of building quantum interactions, collaborative learning so that self-regulation emerged, leading to independent learning.

54427   15:55-16:20 | Room 705 (7F)
An In-Depth Study of the Classroom Management Skills and Techniques of the Senior High School Faculty
Carissa Enteria, Jose Rizal University, Philippines

In its first year of full implementation in the Philippines in 2016, the senior high school (SHS) curriculum meant more classrooms, learning materials, and teachers. At Jose Rizal University, one of the oldest universities in Metro Manila, Philippines, the enrollment of one thousand six hundred (1, 600) SHS students resulted in the hiring of many new teachers. With the newly-hired teachers' diverse background and work experience, the teachers' classroom management skills and techniques were the focus of this study. The researcher also attempted to discover whether the teachers' beliefs and practices in managing the classroom contribute in effective teaching. Using the convergent parallel mixed methods design, the quantitative data i.e., survey results from thirty-three (33) out of forty-four (44) SHS faculty were analyzed separately from and then merged with the qualitative data which came from focus group discussion, classroom observation, and the teaching philosophy statements of six participants. Using the Pearson R and analysis of variance (ANOVA), the results revealed that the frequency and the usefulness of the beliefs and practices of the SHS teacher-participants had different degrees of influence to their classroom management practices. Though they believed that some of the practices were useful, these did not manifest in their observed classroom management. Meanwhile, the practices that were not so frequently practiced as claimed by the participants were those which were actually manifested in their classroom management. Moreover, teachers practiced their beliefs as influenced by their philosophy in teaching. This study was done so that the faculty will take a more reflective look at their classroom management skills and techniques to practice those which are truly useful since effective classroom management means more student involvement and lesser student misbehavior that may eventually result in better student achievement.

54555   16:20-16:45 | Room 705 (7F)
Motivational Leadership and Inclusive Education: Factors and Challenges to Motivate Primary Head Teachers' in Bangladesh
Md Shah Moazzem Hossain, Proyash Institute of Special Education and Research, Bangladesh University of Professionals, Bangladesh
Sifat-E- Islam, UNICEF, Bangladesh

Motivational leaders run their institutions with a purpose. This study was aimed to investigate the factors that motivate primary school head teacher of Northern part of Bangladesh and as well what challenges are there to motivate them in the right direction. The study was qualitative in nature and semi-structured interview and Focus Group Discussion (FGD) took place to get the data. Through purposive and random sampling, a total sample size of 20 was selected and participants were only from northern parts of Bangladesh. The study findings suggested that salary, the opportunity of professional development, knowledge of inclusive education, policy, job satisfaction, parents and other stakeholders' cooperation play important role in determining the level of motivation towards implementing inclusive education. Head teachers argued that when those factors are unsatisfactory by any means to them cause a challenge to get motivated towards inclusive education. This study has an implication on doing further study with larger sample size which will make the result more generalized and types of initiatives should be taken to make head teachers motivated in their leadership role to make a school inclusive.

15:05-16:45 | Room 707 (7F)
Saturday Session IV
Teaching Experiences: Mathematics Education

Session Chair: Janice Bolen

53351   15:05-15:30 | Room 707 (7F)
Understanding Mathematically Talented Male Learners' Perception of Teaching Mathematics as a Profession: A Path Analysis
Kim Jann A. Calibara, Alimodian National Comprehensive High School, Philippines

This survey research is grounded on the objectivist epistemology and informed by positivism. Path analysis was used to examine the predictive and mediational role of parental support, classroom environment, value, attitude, and anxiety in the perception towards teaching mathematics as a profession of mathematically talented male senior high school learners. One hundred eighteen learners from purposively selected big public and private schools in the city of Iloilo and in the 1st, 2nd, and 3rd districts of the province of Iloilo during the school year 2018-2019 participated in the study. Six instruments were used to gather data which underwent content validation and reliability testing. In the descriptive part, results revealed that mathematically talented male learners have moderate parental support, positive classroom environment, very useful value of Mathematics, strongly positive attitude, low anxiety, and moderately high perception towards teaching Mathematics. In the inferential part, parental support, value and attitude can directly predict the perception towards teaching Mathematics but not with classroom environment and anxiety. Moreover, parental support, value and attitude were partially mediated while classroom environment was completely mediated on the influence the perception towards teaching Mathematics by the other constructs included in the model. Furthermore, classroom environment has an effect on the perception towards teaching Mathematics indirectly. Parental support has the highest contribution in predicting the perception towards teaching Mathematics. In conclusion, these findings indicated that parental support has the biggest attribution in predicting mathematically talented male learners' perception towards teaching Mathematics.

53009   15:30-15:55 | Room 707 (7F)
Readiness, Difficulties, and Assessment Practices of Pioneer General Mathematics Teachers: Bases for the Development of Performance Task Modules
Rene Noquera, Dapdap National High School, Philippines
Dolly Rose Temelo, West Visayas State University, Philippines

This design research aimed to determine the level of perceived teaching readiness, teaching difficulties, and performance assessment practices of the General Mathematics teachers. Results of these were made as bases in producing performance task modules which hope to broaden the range of tasks used by the teachers in assessing the students' mathematical knowledge and skills. The three researcher-made instruments namely, Teaching Readiness Questionnaire, Teaching Difficulties Questionnaire, and Performance Task Assessment Questionnaire were the data sources. Adapted evaluation tools were used by the students, curriculum expert, teacher and observer to evaluate the developed performance task module. Statistical tools such as frequency, rank, mean, and standard deviation for descriptive statistics and Pearson's r for inferential statistics were used to treat and analyze the data. All inferential statistics were set at .05 level of significance. Results showed that the General Mathematics teachers have "high" level of perceived teaching readiness, "low" level of perceived teaching difficulty, and "very satisfactory" performance assessment practices. The study also revealed the fourteen learning competencies which were considered difficult to teach by the General Mathematics teachers. Analyze, Design, Develop, Implement and Evaluate (ADDIE) model was considered in coming up with the first module on Functions and their Graphs and the second module on Business Mathematics and Logic which were given "very high" acceptability rating by the set of evaluators and "outstanding" rating by the students. It is recommended that the developed performance task modules be fully utilized by the General Mathematics teachers in order to serve their purpose.

53286   15:55-16:20 | Room 707 (7F)
Reasoning Skills, Content Knowledge, and Conjecturing Ability of Pre-service Mathematics Teachers
Jan Rex Osano, West Visayas State University & Paref Westbridge School, Inc., Philippines

This mixed-method study was conducted to find the level and relationship of conjecturing ability of pre-service mathematics teachers to their reasoning skills and content knowledge, find the predictor of conjecturing ability, identify the problems in making conjectures, and ways to cope with those difficulties. The participants of the study were 25 pre-service mathematics teachers. The data-gathering instruments were three multiple-choice tests for reasoning skills, content knowledge, and conjecturing ability. In-depth interview was conducted to determine the problems and difficulties in generating conjectures, and how to cope with these problems and difficulties encountered. After collecting quantitative data and analyzing its result, qualitative data analysis was utilized to support in detail the initial quantitative results. Results revealed that pre-service mathematics teachers has "average" level of content knowledge and conjecturing ability while "high" reasoning skills. It was found out that content knowledge and reasoning skills has significant relationship same with content knowledge and conjecturing ability. On the contrary, reasoning skills and conjecturing ability has no significant relationship. The result of linear regression analysis indicates that content knowledge was the only predictor of conjecturing ability. Pre-service mathematics teachers revealed that retention of previous lessons and their perception of geometry as a subject were the difficulties encountered in making conjectures. Also, in facing those problems, pre-service mathematics teachers used, remembering past lessons, finding pattern, and, identifying given through illustrations and visuals in geometry in order to cope with it. Moreover, an increase in pre-service mathematics teachers' content knowledge implies an increase in their conjecturing ability.

53664   16:20-16:45 | Room 707 (7F)
Pre-service Teachers' Mathematics Anxiety and Teaching Anxiety, Self-Efficacy and Efficacy Beliefs Toward Teaching Mathematics: A Path Analysis
Janice Bolen, University of St. La Salle, Philippines

This study explored the interrelationships among pre-service teachers' mathematics anxiety, teaching anxiety, self-efficacy, and efficacy beliefs toward teaching mathematics. Participants consisted of secondary mathematics pre-service teachers (N=333) in state universities and colleges of Western Visayas, Philippines. Path analysis was used to validate direct and indirect effects of mathematics anxiety, self-efficacy, and efficacy beliefs in teaching mathematics to teaching anxiety in the revised model. No direct effects from mathematics anxiety to teaching anxiety were observed; however, it may be mediated by self-efficacy, efficacy beliefs in teaching mathematics and teaching anxiety resulting from content, attitude, and self-confidence. Direct and indirect paths from self-efficacy and efficacy in teaching mathematics to teaching anxiety reveal that as the self-efficacy beliefs toward mathematics teaching increases, mathematics teaching anxiety decreases. The variables with the strongest total effect on anxiety resulting from knowledge toward teaching mathematics is the teaching anxiety resulting from content and resulting from self-confidence. Personal mathematics teaching efficacy has the strongest negative effect on anxiety resulting from the attitude toward teaching mathematics, has the strongest negative direct effect on anxiety resulting from self-confidence and also has the strongest negative effect on anxiety resulting from content toward mathematics teaching. No mediating effects were observed involving self-efficacy and efficacy beliefs in teaching mathematics. Mediating effects of teaching anxiety about attitude from the anxiety about content to knowledge in teaching mathematics were observed. Additionally, teaching anxiety about content and attitude also mediated the effect of teaching anxiety about self-confidence on anxiety about knowledge toward teaching mathematics.

Notes

Sunday
November 03

Parallel Sessions

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

Sunday Session I

Learning Experiences

Session Chair: Chooi Yi Wei

54394   09:00-09:25 | Room 603 (6F)
Heidegger and Wittgenstein Identify Transdisciplinary Learning Outcomes
Charito Pizarro, University of San Carlos, Philippines

From Pre K-12 to Post Graduate levels, all teaching-learning ought to have an integrated orientation. The said integration is necessary since we use the word 'education' to refer to the learning outcomes intended to 'educate' mankind worldwide according to the lexical and etymological framework of the word. Systems of achieving learning outcomes structure the formulation of the goals of education in many countries. The 'Ultimate Performances' as 'Exit Outcomes' of Outcomes-based Education (Spady,1994), for example, operate on a teaching-learning loop with a conceptual terminology that is described as "intrinsically consistent" and "connected." However, over and beyond the targeted outcomes regarding the knowledge of skills and competencies regulated in the syllabi of OBE required of professional teachers, there yawns an undetected gap. The gap marks the absence of an ontological closure to the learning loop created by learning outcomes-based education. This closure of the learning loop is the answer to the question that nevertheless remains unanswered: what really is 'education' for? Are those learning outcomes aimed at by the educational institutions, although serving their pragmatic functions, perhaps subsidiary or peripheral to what mankind deeply needs? This paper explores the meanings of 'learning outcomes' and concludes with results met by investigating the concepts and the terminology used by Martin Heidegger and Ludwig Wittgenstein, in order to orient global education along the path of an encompassing learning outcome that overrides the pragmatic.

53977   09:25-09:50 | Room 603 (6F)
Hidden Treasures: A Meaningful 3D Experience
Magdinayive del Pilar Sarmiento, Lycée Francais Louis Pasteur, Colombia

This paper presents an experiment of pedagogy through active work in the classroom. It aims at giving students the opportunity to create bilingual pop up books through a project-based teaching method. It has been successfully carried out for five years. Pupils start developing the project in several steps throughout the year. First, they are asked to read a fantastic book based on archaeological findings. It is the inspiration for the research task and the creation of stories. Second, they do research on the most important archaeological discoveries in Colombia and around the world. Then, they have workshops with the publishing house for learning the main pop-up techniques. After that, in pair working, students create their own stories based on their archaeological research. They translate stories into French, make the pop-up books and present them to elementary kids as they teach them how to make their own mini books. The result: An innovative project set to capture little kids minds as they learn to read both Spanish and French. The authors also present their books in several settings. The best books are published. Some of them are donated and others are sold. The funds raised are intended to help public schools develop the same project. It also motivates pupils to find talents which teachers cannot always perceive in the classroom.This is an initiative which foster intercultural education making children become more sensitive and tolerant as well as to understand that reading is a powerful tool to reach a more inclusive education.

52304   09:50-10:15 | Room 603 (6F)
Scavenger Hunt Activity to Enhance Students' Learning in Engineering Fundamentals
Ee Von Lau, Monash University Malaysia, Malaysia
Alpha Agape Gopalai, Monash University Malaysia, Malaysia
Phaik Eong Poh, Monash University Malaysia, Malaysia

The drawbacks of traditional content delivery methods have shown to be detrimental to the learning process of students, particularly on fundamental based subjects. Active learning methods have increasingly been used as a replacement or supplementary to passive learning as these promote students' involvement in the learning process, and thus allow them to engage better in the subject. This study reports empirical findings on students' perceptions towards scavenger hunts as an active learning technique to complement traditional teaching methods in engineering fundamental subjects. Scavenger hunt was employed in three engineering units namely Thermodynamics 1, Thermo-fluid & Power Systems and Introduction to Process Simulation at Monash University Malaysia towards the final few weeks of the semester. Students were then voluntarily able to provide anonymous feedback through an online feedback form, whereby the total number of respondents was 64 students. The results demonstrated an overall positive reception towards the scavenger hunt, with a vast majority (approximately 78 % of the respondents) recommending active learning methods to be implemented in other engineering units. Furthermore, key areas were identified in order to improve the scavenger hunt activity in order to enhance students' learning.

53800   10:15-10:40 | Room 603 (6F)
The Influence of Student Learning Styles Toward Behavioral Intention in Learning Using Online Educational Games Platform
Chooi Yi Wei, Universiti Tunku Abdul Rahman, Malaysia
Surindar Kaur Gurmukh Singh, Universiti Tunku Abdul Rahman, Malaysia
Malvin Kaur Kunden Singh, Universiti Tunku Abdul Rahman, Malaysia
Hong Beng Yeoh, Universiti Tunku Abdul Rahman, Malaysia

The rapid expansion of new technologies has led to a change in the learning and teaching process. With the paradigm shift, the conventional teaching method no longer appeals to the current generation whose lives revolve around social media and technology. It is time educators learn to adopt new teaching methods to cater to the learners' needs. Fun learning evokes enthusiasm among learners. Hence, this study attempts to investigate how different learning styles among students influence their perception towards the intention to learn using online educational games instead of conventional learning. Technology Acceptance Model (TAM) is employed in this study. Perceived usefulness and perceived ease of use from the model serve as the mediating variables in strengthening the analysis. This quantitative study employs a questionnaire adopted from the Selmes Learning Style Inventory targeting approximately 400 undergraduate students in a private higher institution in the northern region of Malaysia. The inventory consists of five learning styles which are deep learning, surface learning, well-organised learning, diligent learning, and motivational learning. Data obtained was analysed using Partial Least Square- Structural Equation Modelling (PLS-SEM) version 3.0. The expected outcome aims to enhance the student's behavioral intention to learn via online educational games during lecture based on their learning styles. This study further provides insights to the educators who adopt 21st-century learning methods, to take into account their student's learning behavior before preparing the teaching materials so as to produce talented and high potential learners.

Sunday Session I

Inclusive Education

Session Chair: Hui Lan Wang

54446   09:00-09:25 | Room 604 (6F)

Improving Equity by Means of Area-Based-Education and Data Management: Students' Scholarships and Learning Analytics in Chiangmai Province, Thailand

Somying Saithanu, Sodsri-Saridwongsa Foundation, Thailand
Kongkiat Kespechara, Sodsri-Saridwongsa Foundation, Thailand
Chonlada Sittitoon, Sodsri-Saridwongsa Foundation, Thailand
Apansarin Kanarat, Sodsri-Saridwongsa Foundation, Thailand
Pinanong Hakard, Sodsri-Saridwongsa Foundation, Thailand
Dollaya Hirunyasir, Sodsri-Saridwongsa Foundation, Thailand

Despite more than two decades of education reform efforts, Thailand has been experiencing persisting challenges of inequity in its education system which commonly ignores personal individuality and regional differences. Area-Based Education (ABE), which gives learning-providers agencies autonomy in managing education according to area's context and capabilities, as well as modern data management, could be the solution, as demonstrated in the Chiangmai province. The Chiangmai Education Reform Alliance (including public participation, private sector, NGOs, and the Chiang Mai Provincial Administration Organization) coordinates fundraising which enabled the program to provide tuition scholarships to students from low-income families at secondary, vocational and university levels. The criteria for receiving scholarships were low household income, average grades above D (above failure—no excellence required), and participation in social voluntary work. The analog data—scholarship application forms and results of interviews with students and related key informants (2018)—was transformed to structured data by Learning Analytics to visually demonstrate the efficiency of fund management and area distribution. The total number of applicants was 346, of which 186 received scholarship and 160 didn't. Most applicants came from low-income families from all districts. However, scholarship recipients had in average lower annual household-income with median quartile of 1,295 USD, comparing with 1,505 for all applicants and 1,862 for non-recipients (average annual household-income in Chiangmai is 7,373 USD). Results show that scholarships were given according to the desired goal of improving equity in education and Learning Analytics can improve efficiency, strategy design, and performance for policymaker in the future.

54883   09:25-09:50 | Room 604 (6F)

Sounds of Silence: Inclusive Education in Rural Bangladesh

Ferdousi Anis, Victoria University, Australia

International law now shapes inclusive education policies and practices and in the country of Bangladesh. Successful implementation of inclusive education policy is important to achieve Education For All (EFA) and post 2015 goals. However, inclusive education practices and implementation appear to be focused on urban environments and there is an absence of context-specific policies and lack of information on the rights of people living in rural areas of Bangladesh. International literature suggest that rural people have been marginalised and ignored in inclusive education policy and practices and excluded from education in Bangladesh. With limited research into the educational rights and access to education outside urban environments, little is known about how inclusive education practices have been implemented and how inclusive education policy is faring in rural areas. This ethnographic case study has investigated the implementation of inclusive education policy in two rural villages in Bangladesh. Focusing on the absence of rural voices in existing literature, the study has drawn on the justice, rights and inclusion theories of Sen, Spivak and Slee to investigate how inclusive education policy and practice has been implemented in rural Bangladesh. The study investigates the question, 'who will listen?' to subaltern voices, posed by Spivak, rather than 'who will say'. Roger Slee's (2018) questions, 'who's in?' and 'who's out?'is examined to focus on policy practices. Findings from this study will inform the development of policy and practices that assist developing countries to develop inclusive education policy and strategies for rural areas.

53656   09:50-10:15 | Room 604 (6F)

Internal Migration in China: Are Rural Migrant Workers Uniquely Socially Vulnerable?

Jason Hung, London School of Economics (LSE), United Kingdom

Since 1980, China has been experiencing the largest migration in human history to urban areas. Rural migrant workers are exposed to disproportionate stress, a sense of marginality, language barriers and low social positions. This research hopes to understand whether internal migration per se is associated with unique social vulnerability among rural migrant workers. This research compared the extent of social exclusion faced by rural migrant workers and local rural dwellers. The research question under investigation was whether rural migrant workers encountered greater extent of social exclusion as relative to local rural dwellers. Data from the Rural Urban Migration in China (RUMiC) 2007-08 datasets were used for analysis. 6 binary logistic regression models were built, each with a component of social welfare and/or social network as the response variable. Gender, age, ethnicity, job nature and working hours were chosen as confounding variables. Educational level was taken into account as the independent variable. Cross-tabulations and binary logistic regression analysis were run. The better the educational attainment rural migrant workers received, the more social welfare they were entitled and the more helps they could obtain based on their social network, where appropriate. However, regardless of educational attainment, local rural dwellers were significantly more socially included than their rural migrant counterparts. Educational attainment is an important determinant of social inclusion among rural migrant cohorts. Also, internal migrant status per se is a crucial factor prompting social exclusion, leaving rural migrant cohorts a uniquely socially vulnerable population.

54597   10:15-10:40 | Room 604 (6F)

Rural Experimental Education in Taiwan – the Perspectives of Social Constructionism

Hui Lan Wang, National Pingtung University, Taiwan

The aim of this study is to provide brief review and discussions of experimental education development in rural area of Taiwan under the contexts of "The Three-types Acts of Experimental Education" which had passed since 2014. As the issue of experimental education had closely connected with the rights and autonomy of students and parents for learning and schooling, however the rural experimental education is critically connected not just the autonomy of learners, but also the equality of education opportunity. In this study, the perspectives from social constructionism which particularly highlighted by Kenneth J. Gergen, an American social psychologist, would be employed as the key tool to reveal the contexts of real problems and struggles that rural schools and communities encountered in Taiwan, and why and how the experimental education could be the possible way-out. Trying to use multiple ways of seeing the world, constructionism is an invitation to creativity, through the reconsideration of "the being in the relationship" and keeping open dialogue and communication of the members within social networks, it asks the researcher to think carefully about what is being contributed to the education, culture and the world, and furthermore more reflections, efforts and actions are necessary for the construction of civil society.

09:00-10:40 | Room 605 (6F)
Sunday Session I
Professional Development for Teachers
Session Chair: Salina Saiman

53400   09:00-09:25 | Room 605 (6F)
From Teaching to Learning – Becoming Coach for Learning by Doing to Build Educational Capacity in Nepal
Janne Karjalainen, Oulu University of Applied Sciences, Finland
Ulla-Maija Seppänen, Oulu University of Applied Sciences, Finland

Transformation from a teacher to a learning facilitator is a challenging task; the essence of learning is complex, because at the center of it are sets of actions and thoughts interrelated to each other in different ways. There are various ways for the learning facilitator to support the learner depending on the educational design and the personalities involved. This transformation is needed because the world is becoming more interconnected and its problems are more complex. The skills to support learning of problem solving and development are essential in preparing students to develop solutions for changing needs of the society. This study describes experiences of teachers who are developing skills from instruction-based teaching to facilitation-based learning to be able to coach students in interdisciplinary project studies. Data has been collected in Nepal during BUCSBIN-project (2017-2020) which is a Finnish capacity building project to support Nepalese HEIs to transform their education and support entrepreneurship. Multiple data collection methods have been used; feedback surveys, interactive feedback methods, in-depth interviews and written self-evaluations. Data was collected from 105 respondents between April 2018 May 2019. Results show that most participants identify finding a new framework for their work. A considerable amount of the respondents are also reflecting on their professional and personal development. This study focuses on examining the results more closely and reflecting on the trainer's own experiences. Both qualitative and quantitative data is used when reporting the results.

53287   09:25-09:50 | Room 605 (6F)
Explaining Teachers' Interdependency in a Primary School Through Hofstede's Cultural Dimensions
Md Shajedur Rahman, The Open University, United Kingdom

According to existing research, teachers' interdependency with colleagues is considered as a contributing factor for their professional development. Teachers' interdependence and joint works are assumed as conducive to their professional learning in context. However, what promotes collaborative and interdependent environments remains an ongoing research subject. Existing research mostly considers individual and organisational level factors that contribute to or restrict interdependence. However, this current research, a doctoral study, explores the effect of wider culture on teachers' interdependency and collaboration. The aim of this presentation is to explain how cultural factors affect teachers' interdependency in a school using a four-dimensional cultural model developed by Geert Hofstede. This approach helps to define the cultural characteristics of the society the school is located in and their effect on teachers' relationships. The model represents four dimensions of culture, namely: power distance, uncertainty avoidance, individualism and collectivism, and femininity vs masculinity. How these four cultural dimensions affect teachers' relationships is the focus of this talk. An ethnographic approach was adopted in this research. Qualitative data was collected from the interactions of twelve teachers in a rural primary school in Bangladesh. Teachers' day to day activities were observed, their staffroom conversations were recorded, and they were interviewed for approximately two months. The extended period of data collection and a thematic analysis helped to understand the nature of teachers' collaboration and their interdependence and the factors that affect their relationships.

53984   09:50-10:15 | Room 605 (6F)
Enhancing Teachers' Personality and Social Competence: MBTI Approach
Winda Dewi Listyasari, Universitas Negeri Jakarta, Indonesia
Supadi, State University of Jakarta, Indonesia
Siti Zulaikha, State University of Jakarta, Indonesia
Evitha Soraya, State University of Jakarta, Indonesia
Devie Yundianto, State University of Jakarta, Indonesia
Fathurrohman, State University of Jakarta, Indonesia

This research aims to identify primary school teachers' personality profile in Jakarta using Myers-Briggs Type Indicator and design trainings to improve the social and personality competence accordingly. The research was conducted using mixed-method with qualitative and quantitative approaches. MBTI instrument was utilized to gather data from 350 elementary teachers aged between 21 – 60 years old, from 47 schools in 5 administrative districts (North, Central, South, East, and West) of Jakarta. The result showed ESTJ type dominates teachers' personality profile with 118 participants (33,7%), followed by ESTP with 59 participants (16,9%) and ESFJ with 51 participants (14,6%). Based on the type distribution, we designed pre-trainings which were held on 27-28 July, comprised of 15 elementary teachers in East Jakarta district. Treatments through multi-phase trainings were conducted according to each personality type. Pre-test, post-test and instruments related were distributed to measure the impact of given treatment on the subject matter.

54563   10:15-10:40 | Room 605 (6F)
Impact of Network Learning Community on Teachers' Capacity Building in ICT and AfL
Salina Saiman, Ministry of Education, Singapore
Siti Raihana Husainni, Ministry of Education, Singapore

To ensure continuous teacher learning, The Singapore Ministry of Education (MOE) has encouraged community-based teacher learning structure through the formation of Professional Learning Community (PLC) and Network Learning Community (NLC) in all schools. These PLCs and NLCs carried out lesson studies and action research in an effort to improve teaching and learning in classrooms. In the teaching and learning of Mother Tongue, the formation of PLCs/NLCs in 2017 have been instrumental in deepening teachers' capacity especially in the use of ICT in the T&L of MTL. This focus in ICT is the result of the review of the Mother Tongue Languages (MTL) in 2010 where the incorporation of ICT in T&L of MTL was recommended to inculcate active and proficient users of MTL. This recommendation gave birth to the Interactive Mother Tongue Language (iMTL) portal. The iMTL portal also allow assessment for learning where timely and consistent feedback with the use of teacher, peer and self-assessment. The formation of NLCs brings about a positive impact on teacher's capacity in using ICT affordances and at the same time enhance assessment for learning (AfL) in schools.

09:00-10:40 | Room 607 (6F)
Sunday Session I
Workplace Education
Session Chair: Fei-Rung Chiu

53328   09:00-09:25 | Room 607 (6F)
Bringing Corporate Soft Skills Training to China: Challenges and Achievements
Olga Gavrilova, EPAM Systems, China

Increased Learning and Development Departments influence worldwide and growing executive support bring the corporate training to a new level in general and among other things stimulate knowledge sharing with new locations on international companies' global maps. The presentation aims at finding the balance between the independence of the local soft skills training content which has to bridge the location-specific skill gaps and the interdependence of all company's internal L&D activities nurturing the common global-scale corporate values. The presentation explores the case of bringing global L&D experience of an international digital services provider (a NYSE-listed company with 30000+ employees in 25+ countries) to its branches in the 1st and 2nd tier locations in China and highlights the challenges it had to face in soft skills gaps assessment, training content design and adaptation, employee engagement in specific soft skills training programs, and their overall commitment to lifelong learning. The presentation gives recommendations on how to motivate and engage the fastest-changing digital industry learners belonging to different age / educational background groups in China in soft skills training activities, what corporate recognition tools (Heroes Portal badges, L&D team's or first line managers' personalized recognition, Global Impact Awards, etc.) prove to motivate learners most on the basis of a comprehensive survey of the employees L&D engagement.

52438   09:25-09:50 | Room 607 (6F)
Knowledge Management as a Catalyst to Building Resilient and Effective Human Capital in Manufacturing Companies
Charles Mazhazhate, Bindura University of Science Education, Zimbabwe
Tafadzwa Mudondo, Harare Polytechnic, Zimbabwe

The study argues that human capital development is more effective if it is done from a knowledge management perspective which helps to shape attitudes and foster ethical values for higher productivity. Human capital is central to productivity in an economy and if well groomed, result in sustainable development of a society. Human cultures vary, but application of knowledge management perspectives lead to cooperation, collaboration, team work and understanding that all people desire to live in a safe and secure world. Knowledge management is an idea-generating process that must be shared within the organization through tacit means or knowledge which leads to the alignment and integration of human resources' skills, competences and abilities to the positions held by the various incumbents in the organization. Knowledge management also implies the product value and features should match the cultural and physical inclinations of that community for it to be of any use or market value. Thus, fusion of knowledge management into human capital development leads to development of employees who are able to make decisions in uncertain scenarios and make organizations successful. This was a case study of twenty manufacturing companies and both qualitative and quantitative instrumentation were used. The study found out that use of knowledge management as discipline to guide policy formulation and decisions in organizations was a farfetched idea. No organization used knowledge as one of the co-competences. The study recommends use of research to create knowledge so that decisions are made based on empirical evidence.

54261   09:50-10:15 | Room 607 (6F)
The Development of a Training and Development Program in Educating Thriving Service Employees
Yu-Lin Wang, National Cheng Kung University, Taiwan

Scholars have proposed that it is human energy that helps service employees to regulate their behaviors and emotions in order to meet organizational performance expectation (Bedawy, 2015; Fritz, Lam, & Spreitzer, 2011). Hence, employee training and development programs that focus on effectively educating employee's behaviors become critical. In the psychology literature, thriving employees are characterized by experiencing "growth and momentum marked by both a sense of feeling energized and alive (vitality) and a sense that they continually improving and getting better at what they do (learning)" (Porath, Spreitzer, Gibson, & Garnett, 2012, p. 250). Vitality serves as an affective resource that facilitates employees to overcome the demanding training requirement and come up with positive learning outcomes, such as improvement on behaviors on the job. If service employees are more passionate toward the firm, then they would logically want the firm to do well and would strive to provide superior service. The other cognitive component of thriving at work, learning, refers to the willingness to improve and develop new knowledge and skills may advance one's capability. Therefore, the degree to which the service employees' feelings of energy for work as well as learning at work may affect their behaviors in the workplace. Both affective and cognitive components provide resources that enable employees to maximize the results of training and performance development. As a result, the purpose of this study is to review literature and propose the training and development program in educating the service employee's thriving behaviors in workplace.

54525   10:15-10:40 | Room 607 (6F)
Application of Mixed Reality to Cultivation of MICE Human Resources: Evaluation of MR Teaching System Through Inquiry-Based Learning
Fei-Rung Chiu, Overseas Chinese University, Taiwan
Chien-Yu Chen, National Taiwan University of Science and Technology, Taiwan
Yi-Ming Li, National Taiwan University of Science and Technology, Taiwan
Yun-Ke Wang, Overseas Chinese University, Taiwan

This paper presents an application of the novel Mixed Reality (MR) technology in cultivation of human resources for the MICE (meetings, incentives, conferencing, and exhibitions) industry. Based on the inquiry-based learning approach, we designed MR teaching materials about "exhibition planning" for training MICE professionals and developed an "MR-based Exhibition Planning Teaching System". The effectiveness of the proposed MR teaching system was assessed using the quasi-experimental method. The participants in the experiment were recruited from first-year students of Department of Hotel and MICE Management in Overseas Chinese University and divided into the experimental group and the control group. The two groups were respectively given instructions with MR teaching materials and instructions with traditional teaching materials. The learning outcomes of the two groups were analyzed and compared. Results indicated that the experimental group achieved significantly higher learning efficiency and learning retention than the control group, and the satisfaction survey also found that the MR teaching materials effectively increased the learning interest, willingness to learn, and impression of course lessons in students.

09:00-10:40 | Room 608 (6F)
Sunday Session I
Visual Learning
Session Chair: Alice Shiu

54226   09:00-09:25 | Room 608 (6F)
Development of Visual Instrument Base on Moral Foundation Theory
Ika Amalia Kusumawardhani, Tarumanagara University, Indonesia
Monty P. Satiadarma, Tarumanagara University, Indonesia
Untung Subroto, Tarumanagara University, Indonesia

Moral foundation theory is a theory of moral formulated by Jonathan Haidt. This theory was developed and measured using The MFQ (Graham et al, 2011). In this research, the study is aimed at adjusting the MFQ instruments in forms of drawings. Pictures that are made, still based on five dimensions measure in the MFQ. This MFQ adapting into visual form and being examined on 30 adolescents participants with an age range of 16-23 year old. Participants are residing in the vicinity of Jakarta, Depok City, and Tangerang City. The participants were asked to describe the instrument when the sets of the image presented. The researcher noted every content that explained by the participant. The adaptation process takes three steps to ensure its content to follow five dimensions of MFQ expected content. The analysis of the result show increasing of the suitability of the theme and Insight of universal moral. Furthermore, the development of this instrument is then expected to be used as an indicator of the suitability of the participants' test answers from MFQ. In addition, this instrument is expected to be the basis for teaching moral values following the moral foundation they have.

52880   09:25-09:50 | Room 608 (6F)
Visual Literacy: An Exploration of How Students Integrate Visual and Verbal Text in Learning Reading Comprehension
Nopa Yusnilita, Universitas Baturaja, Indonesia

The objective of this study was to explore the impact of visual literacy for students in comprehending the text. Visual literacy means the ability to both read and write the visual information. The visual information could support in building comprehension of reading skills for students. In this term, the students learnt to critically analyze the visual image. In this study, the participant was 20 students from junior high school. The data were collected by using observation and it was analyzed descriptively. The result showed that in the digital era, communication via image is more easy and practical than via text. In visual literacy the students not only see the image but also analyze, create the meaning and evaluate it. It also brings great influence for the students in learning, especially reading. The students were more critically in thinking and creative response to express the meaning of text. It could be concluded that visual literacy supported the teaching and learning process, especially in helping students and teacher.

52967   09:50-10:15 | Room 608 (6F)
Using Everyday Life Contexts Photographs to Communicate High School Science Concepts: Are We There Yet?
Andile Mji, Tshwane University of Technology, South Africa
Asaph Ntu Nkomo, Tshwane University of Technology, South Africa

This paper describes a study in which Grade 12 teachers were asked to indicate whether a selected photograph could be used in Physical Science. If the teachers indicated "Yes", they were requested to state areas of Physical Science in which they would use the photograph In addition to this they were given a list of A classification of teaching functions of pictures adopted from Hannus (1996).and they asked to indicate whether a selected photograph has a potential to perform the teaching functions of pictures or not and supply a reason that support their opinion. The qualitative study from which this article emerges worked with five physical science teachers. An attempt was made to try and investigate the pedagogical role of everyday life contexts photographs. Our conclusion is that teachers must be equipped with appropriate visual representation skills. Essentially that will allow them to demonstrate scientific literacy using the photographs found in their society.

53407   10:15-10:40 | Room 608 (6F)
Strengthening Instructional Video Design Through the Use of the Storytelling Framework
Alice Shiu, The Hong Kong Polytechnic University, Hong Kong
Eric Chow, Apps Resource Centre at Hong Kong Baptist University, Hong Kong
Joseph Chow, The Hong Kong Polytechnic University, Hong Kong

Thanks to their well-documented benefits, videos have become increasingly popular as a valuable learning and teaching tool in higher education. The optimum utilization of such benefits, however, depends on the design of the videos. The focus of the current paper is to provide an overview of our video design procedures for teaching microeconomics. It outlines the procedures for storyboard development, and by using qualitative comments taken from a laboratory experiment for an existing video constructed by the design team and with a storytelling framework, it describes how we can improve the existing storyboard design for a chosen example video. We designed and constructed videos for teaching microeconomics since 2015. To examine whether using videos have a comparable positive effect on student economics knowledge as the traditional text, we carried out a laboratory experiment in Business Experimental Research laboratory (Bizlab) in The University of New South Wales in 2017. Our findings supported a positive student perception of videos compared to the text materials and that videos and written text had a comparable education impact. This paper emphasizes the use of a storytelling framework to properly design the way and amount of information transmitted through videos, especially with regards to the content and duration, with the intent to increase video's effectiveness for students' learning. To what extent the storytelling techniques can improve students' engagement depends on further investigation of student motivation and willingness to participate in a laboratory experiment setting.

Sunday Session I

International Education: Students

Session Chair: Naomi Tsunematsu

52454   09:00-09:25 | Room 609 (6F)
A Critical Entry of International Students into Intercultural Communication in Higher Education
Morteza Sharifi, University of Auckland, New Zealand

Internationalisation is inevitable and necessary for higher education in an ever more globalised world. Key to its successful negotiation by higher education institutions is intercultural communication, through which students, whether local or international, develop their skills to live, work and understand others as global citizens. However, intercultural communication does not happen simply because local and international students are on campus and in classrooms together. In fact, the research shows that intercultural encounters may lead to internationals forming negative attitudes about locals, and vice-versa, if they are not adequately trained in intercultural communication. For example, some scholars propose projects like assigning a local student as a buddy to an international student so that they can both learn about their respective cultures. However, there is not much evidence that intercultural communication is actually happening, nor is it usual for academic staff to undergo formal training in intercultural awareness and competence, especially in Aotearoa/New Zealand. This study used the lens of critical ethnography to conduct and analyse twelve in-depth interviews with international students in undergraduate to doctoral programmes. The findings generally showed a lack of meaningful intercultural communication between internationals and locals that resulted in mutual misunderstanding and ethnic stereotyping. This suggests that there is a need for further training in intercultural communication for everyone at universities to foster mutual understanding and avoid ethnic stereotyping by internationals and locals.

54815   09:25-09:50 | Room 609 (6F)
Policy Implementation: Basic Education 9 Years Indonesian School Abroad in Malaysia
Erwin Rinaldi, University of Padjadjaran, Indonesia
Budiman Rusli, University of Padjadjaran, Indonesia
Riki Satia Muharam, STIA CIMAHI, Indonesia

Until 2010 there were 14 SILN (Indonesian Foreign Schools) active, Indonesian Schools Overseas, with varying conditions and typologies. One of them was through the establishment of the Indonesian Overseas School in Kota Kinabalu, Sabah, Malaysia. An interesting fact is from the organization of Indonesian Overseas Schools in Kota Kinabalu, Sabah, Malaysia. This school has 141 branches or Community Learning Centers (CLC), which are spread across Sabah and Sarawak. This study aims to examine and analyze how the Implementation of Basic education 9 years Indonesian school abroad in Malaysia using qualitative research methods and the theory of Policy Implementation from Van Meter & Van Horn. The results of the study indicate that : 1) In the aspect of Human Resources Management, teachers and local teachers recruited by GTK with the majority of local teachers still graduating from high school, there are some S1 graduates, but have never been given basic potential knowledge about teacher training; 2) In the aspect of Financial Management, SIKK is still dependent, not yet entered into a permanent DIPA; 3) In the aspect of Infrastructure, there are arbitrary institutions, even more concerned, infrastructure built by the community. Recommendations from the research strengthen the capacity between sections within SIKK and formulate the existing organizational structure for the development of SIKK, and other factors that need to be considered are infrastructure in the management of 9-year basic education in Sabah.

53123   09:50-10:15 | Room 609 (6F)
Multi-dimensionality of Acculturative Stress Among Chinese International Students: What Lies Behind Their Struggles in a US University?
Yue Zhang, Santa Clara University, United States
Eunjoo Jung, Syracuse University, United States

This study aimed to identify the underlying dimensions of acculturative stress that Chinese international students may encounter in the U.S. In addition, we re-examined students' background characteristics and perceived social support from family, friends, and their university as predictors of students' different dimensions of acculturative stress. In total, 262 Chinese international students (average age 23 years; 142 male and 120 female students) from a diverse university completed an online questionnaire in the U.S. This study identified multiple dimensions of acculturative stress, including perceived discrimination, fearfulness, homesickness, stress due to change, and guilt, among Chinese international students. The results indicated that students' comfort level in using the English language and academic status (i.e., undergraduate/graduate) significantly predicted acculturative stress. Notably, as students' comfort level in using the English language increased, their feelings of perceived discrimination, fearfulness, homesickness, and stress due to change decreased. Undergraduate students reported more discrimination and fearfulness than did graduate students. Perceived social support from family indicated an intriguingly different pattern than perceived social support from school in relation to acculturative stress among Chinese international students. This study confirmed the multi-dimensional nature of acculturative stress and highlighted the role of students' background characteristics and perceived social support systems in illuminating each acculturative stress dimension among Chinese international students.

54199   10:15-10:40 | Room 609 (6F)
Independence and Interdependence of Culturally Diverse Students: Autonomy and Empowerment Through Experiential Learning to Cooperate With Local Society in Japan
Naomi Tsunematsu, Hiroshima University, Japan

This research examines how culturally diverse students experienced independence and interdependence through their engagement with experiential learning to be associated with local society in Japan. The international exchange students from North America, Europe, Oceania, and Asia who participated in the Hiroshima University Study Abroad Program (HUSA)* undertook the group projects to enhance intercultural understanding by forming several multinational student groups. Through the projects students learned to cooperate with culturally diverse students and utilize their resources and skills interdependently and also to make decisions independently interacting with host culture. Based on the "Glocal Internship Practicum" course and "Glocal Leadership Group Project" for which I differentiated my educational intervention, I shall examine how multinational students variously exercised their agency with self-autonomy. When students are encouraged to be self-directed and proactive with belief of power, they get empowered and make efforts to get over challenges and obstacles even if they face dilemma of cultural identities and cultural distance. Development of pedagogy for positive engagement with emotional intelligence is critical in creating connections in culturally diverse environment without alienation and polarization, and also connecting students, educators, and communities. *Hiroshima University has concluded exchange agreements with 95 universities in North America, Europe, Oceania, and Asia in 31 countries and two consortiums (the University Studies Abroad Consortium [USAC] and the University Mobility in Asia and the Pacific [UMAP]) in the world (as of April 2019). Approximately 40~60 students attend the HUSA program annually, and they study at Hiroshima University for one semester or one academic year.

09:00-10:40 | Room 704 (7F)
Sunday Session I
Technology in Education
Session Chair: David Hildebrand

52758   09:00-09:25 | Room 704 (7F)
Information and Communications Technology Competencies and Integration Practices of Public Secondary School Teachers in the Philippines
Saddam Bazer, Shaanxi Normal University, China
Elenita Que, University of the Philippines, Philippines
Wenlan Zhang, Shaanxi Normal University, China
Bin Zhang, Shaanxi Normal University, China

This study investigated the ICT competencies and integration practices of 573 public secondary school teachers in a province in the Philippines, particularly their level of ICT competencies, extent of ICT integration, challenges encountered, and their perceptions on ICT integration. The study employed a descriptive-correlational research design which explored the significant relationship between teachers' level of ICT competencies and their perceptions on ICT integration, and the teachers' extent of ICT integration and their perceptions on ICT integration. Pearson Product Moment Coefficient Correlation was used to analyze the foregoing relationships. The findings revealed that: (1) there is a significant relationship between the level of ICT competencies and the perceptions on ICT integration, and (2) there is no significant relationship between the extent of ICT integration and the perceptions on ICT integration. With the foregoing findings, the researcher proposed recommendations that are relevant to the public secondary school teachers' implementation on ICT integration.

54320   09:25-09:50 | Room 704 (7F)
Communication Preference and the Effectiveness of Clickers
Raymond Li, University of Canberra, Australia

In this research a web-based classroom response system ("clickers") was used in the teaching of an intermediate level economics course. Clickers gives students a chance to respond to the lecturer's question privately, encouraging students who might not typically speak up in class to express their thoughts and opinions. The purpose of this research is to (i) find out if the use of clickers is beneficial to students taking economics, and (ii) examine if students' communication preference (e.g. instant messaging, face-to-face conversations, etc.) has an impact on the effectiveness of clickers in improving learning outcomes. An end-of-semester questionnaire and students' examination performance were used to assess the effectiveness of clickers in this research. According to the questionnaire results, around 75% of the students in the clickers treatment group generally agreed that clickers allowed them to express their views more freely. We also observed that students who prefer to use instant messaging rather than making conversations are generally more positive towards clickers. The use of clickers also benefits the lecturer – students' rating of the lecturer in the teaching evaluation was significantly higher for the clickers treatment group. Comparing the examination scores of the clickers treatment group and control group, the treatment group performed considerably better and statistically significant differences were found basing on paired t-tests on the differences. Our regression analysis further discovered that the use of clickers has the most significant positive effect on students who prefer to communicate through instant messaging.

53127   09:50-10:15 | Room 704 (7F)
Students, Teachers, and Devices: Experience-based Education in an Age of Technological Distraction
David Hildebrand, University of Colorado Denver, United States

In John Dewey's educational philosophy, a key role is played by both "experience" and "situations." However creating pedagogically rich experiences for students has become more difficult, as 21st century teachers face a range of technological obstacles, such as the habits and expectations of schools, parents, and students themselves. As documented in recent books such as *Sherry Turkle's Reclaiming Conversation* (2015) and Jean Twenge's *iGen* (2018), teachers find themselves challenged by a highly-connected generation of digital natives — and their highly connected parents. This paper argues that experiential education in the 21st century must reckon with our technological starting point. After a brief review of (a) Dewey's notions of "experience" and "situation" (as they apply to education) and (b) recent literature of technology's effects on classroom space and student headspace, the paper argues that (c) a Deweyan analysis of technology's effects is a crucial pre-condition for pedagogical planning. Finally, (d) the paper argues that the analyses of the previous sections (on experience, situations, and technology) can be advanced using an aesthetic account — such as the one Dewey provides in both his educational works and in Art as Experience. This paper has both a theoretical and practical upshot. Theoretically, philosophers and teachers will see how they might interpret and critique students' technological habits using Dewey's criteria. Practically, educators will learn how they might constructively improve students' authentic experience and learning while seeing that a pragmatist aesthetic approach can set goals that make new pedagogies both relevant and meaningful for students today.

53631   10:15-10:40 | Room 704 (7F)
Developing a Framework for the Teaching and Learning of Representing Skills Through Media Production in Singapore
Wei Jhen Janet Liang, National Institute of Education, Nanyang Technological University, Singapore
Fei Victor Lim, National Institute of Education, Nanyang Technological University, Singapore

This study argues for the urgency of developing multiliteracies through guiding students in the effective production of media texts. It also aims to integrate students' out-of-school experiences with new technologies into English Language classroom. Given that the Singapore's EL syllabus 2010 and 2020 have expressed the importance of students' engagement with multimodal texts through viewing and representing, this study has identified a research gap in the need to develop a pedagogy to teach students' effective representing of media texts. Building on research on multimodal literacy in critical viewing, this study is informed by Systemic Functional Theory and Design Thinking to develop a pedagogical framework for effective representing. This framework offers critical, creative, and technical domains to scaffold students' production of media texts. Based on the proposed framework, this study develops a four-session lesson implementation in a secondary two express English Language class in Singapore. For greater relevance to students' current learning in the classroom, this study integrates the process of applying representing skill in producing media production with the objective of producing a response to a narrative essay topic. The data collection methods include a survey administered to all participants, a reflective dialogue with the teacher, a focus group discussion with students, and students' artefact making. This study demonstrates that the framework proposed contributes in helping students develop effective representing skills of media texts.

09:00-10:15 | Room 705 (7F)
Sunday Session I
Teaching Students with ASD
Session Chair: Mark Ryan Romero

54531   09:00-09:25 | Room 705 (7F)
Design of an Interactive Tangible Sensory Toy for Autistic Children to Improve Their Learning Ability
Jyotsana, Publicis Sapient, India
Abhishek Bose, Go-Jek, India

Autism spectrum disorders (ASDs) are highly prevalent and the number of children diagnosed with it is increasing alarmingly every year. The child's learning is majorly hindered due to poor social interaction, communication, fine motor skills, and attention span. Building these skills in them is a demanding job and interactive toys can come to teacher's and parent's rescue. Although interactive toys can play a vital role and provide a therapeutic effect on children, it is found that there is a lack of such toys in the commercial market. An attempt is made to build such a toy that is specially designed for the learning needs of autistic children aged 4-7 years. It helps in building fine motor skills, developing speech and language, and improving their attention span. This product named Giffo is based on a cause-effect principle and designed by using primary and secondary research data and observation session insights. It gives the multisensory experience that engages their tactile, visual and auditory senses. Moreover, different sensory rewards have been introduced in the form of light and sound which helps in captivating their interest and improves their attention span. It was observed significantly through usability testing that cause-effect play motivates autistic children to play for a longer time and managed to capture and increase their attention span from 1-3 minutes to around 5-8 minutes. Moreover, this product gives them a sense of control by providing a structured situation all the time which makes their learning process efficient.

54542   09:25-09:50 | Room 705 (7F)
Tables with a Half-oval Hole as Individual Treatment Table of ABA Therapy for Autistic Children in Indonesian Autism Therapy Center as an Effective Design to Overcome Behavior
Lulu Purwaningrum, Universitas Sebelas Maret, Indonesia
Joko Yuwono, Universitas Sebelas Maret, Indonesia
Anung Studiyanto, Universitas Sebelas Maret, Indonesia
Satoshi Muraki, Kyushu University, Japan

ABA (Applied behavior analysis) therapy, introduced by Ivar lovaas, is a widely used method for autism therapy in the world due to its success rate. In this therapy, a table is used during individual treatment as a medium for giving instruction and performing tasks between a therapist and an autistic child. In general, this table is similar with ordinary tables that have rectangular or circular top surfaces and dimensions appropriate for children. However, in Indonesia, the table being used is usually modified with a half-oval hole at the side that faces the child. This study discusses the effects of such table for autism therapy and its effective use for autism therapy. FGD (focus group discussion) was conducted with 8 experts in autism therapy in Surakarta including therapists, psychologists, head of autism therapy, and a professor in autism. Almost all agreed that it is necessary to make a half-oval hole on one side of the table to overcome problems such as children who are less involved during therapy and wanting to leave the table quickly, having lack of concentration and even pushing away the table. This kind of table encourages children to be more engaged with the therapy activities. Since the distance between the therapist and the child is closer, It can help therapist in giving instruction and managing the child behavior. However, it is necessary to maintain the children's condition to be relaxed and not depressed, because the basic principle of behavior therapy is giving children a space to explore and develop.

53005   09:50-10:15 | Room 705 (7F)
Video Self-Modelling Intervention on the Social Skills of Children with Autism Spectrum Disorder
Mark Ryan Romero, Department of Education, Philippines

Social skills are abilities that are predominantly challenging for children with autism spectrum disorder (CWA). Unfortunately, most schools focused on academics and this ensues little time to engage the CWA to acquire different social skills. This alarming impact of social engagement deficiencies creates a need for an effective and evidence-based intervention to diminish barriers in acquiring and utilizing important social engagements. The research aims to evaluate the use of Video Self-Modeling (VSM) as an intervention for social skills of the CWA. The researcher used purposive sampling and gathered a total of 10 children diagnosed with autism spectrum disorder (ASD). A mixed method design to describe the result of the survey instruments, documentary analysis, interview, and observation reveal the common social skill impairments of the CWA negatively affecting their relationship with the others. After the use of VSM intervention, most of the clients demonstrated substantial progress and development on their target social skill impairments. This result suggests that the use of VSM is an effective intervention for some social skill impairments of the CWA. Only a small number of the clients showed no positive changes in their target behaviors caused by the difficulties experienced by the teachers and the students on the implementation of VSM. Furthermore, the results of the research were utilized in preparing an easy-to-use guide for future VSM implementation.

09:00-10:40 | Room 707 (7F)
Sunday Session I
Learning Experiences: Maths & Science Education
Session Chair: Mei-Shiu Chiu

54076   09:00-09:25 | Room 707 (7F)
Design and Development of Instructional Material in Grade 7 Science for Diverse Learners
Hernan Apurada, San Juan City Science High School, Philippines

With the K to 12 program implementation, this study crafted a tailored-fit instructional material that addressed the needs of the 21st Century learners. The Enhanced Learners' Module focused on the topics of the first quarter of the Science 7 curriculum. Topics were based on the Learning Competencies provided by the Curriculum. These Enhanced Learning Module undoubtedly assisted and improved the students learning process. It helped to fill some gaps in the first quarter topics in the Science 7 based on the existing Learners' Module. This study used the descriptive type of research. There were 45 student-respondents in the same level and section of San Juan National High School, school year 2018-2019. This study attempted to assess the impact of tailored-fit learning module to the learners. Using the learning module, the study obtained quantitative data through pretest and posttest. Results showed that after using the tailored-fit learning module, learners performed significantly better than before the utilization of the learning module. Furthermore, from average level, after utilization of the module, the learners were moving towards mastery. With these results, the researcher aims to continue to craft instructional materials for the benefits of the learners.

53792   09:25-09:50 | Room 707 (7F)
Teachers' Implementation of the New Grade 7 Mathematics Curriculum in Selected Schools: Opportunities for Improvement
Anthony Castro, University of Santo Tomas, Philippines

The purpose of the study was to determine how teachers implement the new K to 12 grade 7 Mathematics curriculum in terms of content coverage, objectives, teaching–learning activities and assessment of students' learning and to determine the challenges they encounter in its implementation. It was carried out among selected private schools in Metro Manila that are being collectively run by a religious order. To understand the phenomena, multiple case studies design was executed using a triangulation of data collection strategy. Data were collected on the schedule given in coordination with the Mathematics Coordinators, who then coordinated with the participating grade 7 teachers for classroom observations, semi–structured interviews and retrieval of curricular documents. Results have shown that across schools, they have anchored their respective grade 7 mathematics content coverage and objectives with the prescribed minimum standards set by the Department of Education. Also, interviews have shown that schools are gearing up towards student–centeredness in terms of teaching–learning activities but classroom observations show that one class exhibits high quality instruction where the teacher engaged the students with the phenomenon, integrating music and games, integration to real–life situations, and immersing students to problem solving and reflective thinking, that focused on important learning objectives were effectively used while the rest were "traditional" methods. In almost all schools, they have anchored their assessments with the prescribed standards set by the Department of Education. Interviewees have suggested that the intensification of teacher-trainings are needed to better implement the curriculum.

53435   09:50-10:15 | Room 707 (7F)
Mathematics Performance of Students in the Coastal Areas: Basis for the Development of Experiential and Situated Worktext for Grade 7
Melvin Barrido, Estancia National High School, Philippines
Dolly Rose Temelo, West Visayas State University, Philippines

This design research using ADDIE model(the acronym stands for analyze, design, develop, implement, and valuate) aimed to determine the least mastered content standards of the students living in the coastal areas and to develop a learning material that will enhance these content standards. The grades 7 and 8 students of a national high school in the 5th District, Province of Iloilo, Philippines were the respondents of the study. Using Mathematics Performance Test (the instrument was validated/reliability tested)conducted to the grade 8 students, it was identified that their least mastered content standards were understanding the key concepts of sets, understanding of the key concepts, uses, and importance of Statistics, data collection/ gathering, the different forms of data representation, and measures of central tendency. The developed experiential and situated worktext was implemented among the grade 7 students. Mathematics experts and teacher evaluated the worktext using the adopted evaluation form for printed instructional material of West Visayas State University, Philippines, while the students evaluated the quality of the worktext using the adopted student's evaluation form. The used of statistical tools like frequency count, percentage, rank, mean, and standard deviation were employed. The developed experiential and situated worktext was evaluated "very acceptable" by the experts and teachers while the students rated the material as "very good". Students enjoyed using the worktext and they began to develop good impression to Mathematics. Thus, it is recommended that the use of experiential and situated worktext be applied to high school Mathematics classes.

53261   10:15-10:40 | Room 707 (7F)
Adolescent Mathematics Ability Trajectories and Related Ecological Factors
Mei-Shiu Chiu, National Chengchi University, Taiwan

This study used an ecological approach to studying adolescent mathematics ability development by classifying their mathematics ability growth trajectories and examining contextual measures differentiating the identified classes. Longitudinal student and parent data were collected for Taiwanese students in Grades 7, 9, 11, and 12 (n = 4,163). Growth mixture modeling identified 4 growth classes: low-increase, middle-flat, middle-increase, and high-increase. Multivariate analysis of variance revealed that girls' mathematics ability improved and that boys started as middle or high mathematics achievers. Moreover, mathematics ability related to socioeconomic status and academic programs, persistent parental monitoring related to desirable ability development, and student-perceived teaching quality related to student ability. High-increase students reduced their engagement in leisure activities when preparing for examinations, but they felt little mathematics frustration, whereas the opposite was true for low-increase students.

11:00-12:15 | Room 603 (6F)
Sunday Session II
Technologies in Education
Session Chair: Vivian Titular

54306   11:00-11:25 | Room 603 (6F)
Learning, Design and Universality: The Tradeoff Between Access and Outcomes in Digital Education Transformation
Corrin Varady, IDEA Digital Education, Australia

From e-textbooks to content aggregation platforms, to virtual reality there are numerous interpretations on how to deliver education content digitally. The race towards digital has traditionally focused on the delivery of hardware over content innovation. The goal of good digital design aims to create self-directed and independent learners. The instructional nature of curriculum design should be about supporting and transforming teachers into instructional facilitators while still allowing students to determine the pace and complexity of their learning. Good quality content, cognitive graphic design and robust adaptive code are essential for delivering products where the learning outcomes drive the technology rather than the other way around. Designing educational software should push a student's formative self-assessment for learning rather than merely a summative assessment of learning. In large scale deployments, we need to regard three key areas to measure outcomes, namely: 1) curriculum performance and student achievement results; 2) technical and operational alignment and; 3) school efficacy and engagement. This research argues the goals of the educational technology sector are often to provide greater access to universal education through technology, rather than measurable educational outcomes. It examines how educational competency, transformation and standards in regions with large-scale technology implementations are affected by global innovation trends and it explores the degree to which the local identity of the national policy impacts the success of global solutions to local education challenges.

53279   11:25-11:50 | Room 603 (6F)
How to Think as a Nurse? Helping Students to Master Nursing Education Through the Use of Animated Cases
Jaro Zlamal, Lovisenberg Diaconal University College, Norway

Nursing students often struggle with organizing the necessary streams of knowledge from various subjects and skills into one coherent entity —- nursing. In addition, students perceive subjects such as anatomy as straightforward and clear, while nursing subjects often have a reputation for being unclear and confusing. At Lovisenberg Diaconal University College, we have been using animated cases in order to help students to connect the various threads of knowledge between different subjects, and in order to stimulate critical thinking and professional judgment. The use of cases in nursing education has a long tradition, however, animated cases have seldom been used. We have been using a digital animation tool∗ with recorded voices. Using animated cases provides each lecturer with the possibility of creating various scenarios for patients, which can be easily adjusted and adapted. Animated cases also closely resemble real-life patient situations and are subsequently reusable. The feedback from students so far has been positive and students perceive the animated cases as being helpful in connecting the varied material acquired in different subjects. Nonetheless, there are several challenges when using animated cases, which are related to writing case scripts and animating certain patient situations. ∗The digital animation tool described in this abstract is Vyond. The author of this abstract has not received any form of financial or non-financial support and is not associated in any way with Vyond.

54194   11:50-12:15 | Room 603 (6F)
Implementation of Genyo e-Learning in Selected Public Schools in Batangas
Vivian Titular, First Asia Institute of Technology and Humanities, Philippines
Jerrylyn Magbuo, First Asia Institute of Technology and Humanities, Philippines
Gelyn Acar, First Asia Institute of Technology and Humanities, Philippines
Imelda Oruga, First Asia Institute of Technology and Humanities, Philippines

Schools in the Philippines have experienced a parallel increase in acquiring technology in the classroom, not just the private schools but likewise in the public schools. In the context of Batangas, the Bato Balani e-learning Systems Training (BBEST) program was initiated to share the resources and to bring GENYO, an e-learning management system, to the selected public schools. This study was set to assess the perceived level of implementation of GENYO in the BBEST recipient schools. The participants were the school heads, selected teachers from the five learning areas (English, Math, Science, Filipino and Social Studies), and students who were selected based on their direct experience on the utilization of GENYO in their school. Based on the results, the level of implementation of GENYO in selected public school is very high. Teachers and students who participated in the implementation found the GENYO lab very effective in terms of motivating students, introducing complex lessons and facilitating learner-centered classroom. However, the teacher-participants recommended that more contents aligned with the K to 12 curricula may be added and more flexibility in terms of uploading sizes of presentation they made. Moreover, the number of yopads, its accessibility, and the conduciveness of some labs were found to be challenging. Nonetheless, the researchers witnessed, firsthand, the benefits and greater opportunities in learning presented in the implementation of GENYO lab.

11:00-12:15 | Room 604 (6F)
Sunday Session II
Teaching and Learning: Observing the Class
Session Chair: Vera Maria Nistor

54130   11:00-11:25 | Room 604 (6F)
Home Education as a Simultaneously Independent and Interdependent Practice
Amee Parker, University of Otago, New Zealand

Home educating families are simultaneously independent and interdependent. In a New Zealand context, home educators are largely independent from governmental educational authorities and are free to choose their method of education for themselves. Additionally, the children often experience and display a significant degree of independence in terms of their learning and time management. At the same time, however, home educating families are enmeshed in interdependent social structures – most notably with their local home educating groups, but also via online communities. This aspect of home education is under-researched and provides a counter discourse to that of the isolated/disconnected home schooler. This presentation draws on data collected during an ethnographic study of eight home educating families in New Zealand. Through a discourse analysis of interviews conducted with both parents and children it concludes that home educating families value highly both the independence and interdependence they seek and experience. This is significant, not only because of the counter discourse it engages with, but also because it highlights the need to support and legitimise home education focussed groups.

54059   11:25-11:50 | Room 604 (6F)
Developing Classroom Observation Tool for Transformational Teachers
Jhon Hayden Bale, Teach for the Philippines, Inc., Philippines
Valerie Vir Farol, Teach for the Philippines, Inc., Philippines

The Department of Education's mission statement advocates the protection and promotion of the right of every Filipino to quality, equitable, culture-based and complete basic education. Thus, there is a need for teachers and administrators to create a learning environment that would be suitable to the learner, and at the same time, be able to implement the curriculum into meaningful instruction (Sullivan & Glanz, 2013). In the Philippine public education system, the intended curriculum is crafted by the Department of Education. However, different interpretations of the curriculum lead to various curricula, all happening at the same time. To prevent this, supervision of instruction is necessary to ensure fidelity to the intended curriculum. Moreover, to achieve the Department's mission and vision statements, teachers should be transformational – teaching not only the concepts but also the values and skills necessary for the students' holistic development. Ferguson (2006) cited 7 characteristics of an effective teacher, which can be divided into Press and Support measures. These characteristics were the basis of the classroom observation tool development. To validate the indicators in the tool, interviews and focus group discussions were conducted as well as actual classroom observations and debriefs. Orientation and training regarding the characteristics of effective teachers, and calibration on the use of the tool are also conducted. Furthermore, the continuous re-training of teachers, classroom observations and debriefs, and revision of the tool based on Ferguson's study improved the scores of teachers, and consequentially improved student academic scores.

53099   11:50-12:15 | Room 604 (6F)
OP Observer – a Class Observation Tool for Measuring the Effectiveness of Teaching Practice
Don Amila Sajeevan Samarasinghe, Otago Polytechnic Auckland International Campus, New Zealand
Vera Maria Nistor, Otago Polytechnic Auckland International Campus, New Zealand

The aim of this paper is to present an evaluation of the effectiveness of a class observation tool in measuring learner-centred practice at a New Zealand tertiary institution. This research arose from an awareness that many lecturers are still mainly providing teacher-centred classes, which have been proven to be less effective and engaging for the students' learning process. We believe that making this measurement tool more efficient will help capture more information that is beneficial for lecturers' reflective practice and will overall bring about a higher quality tertiary education for students. We designed this project in collaboration with a group of IT students and their lecturer at Otago Polytechnic, Auckland International Campus, New Zealand. We initially conducted class observations on a paper-based tool to identify teacher-centred and learner-centred activities used by lecturers. This was later turned into a Web-based class observation tool for more efficiency. We conducted 25 observations and the results were then discussed with the respective lecturers to involve them in a reflective session on the effectiveness of their teaching practice. Our experience with this tool helped to further create a mobile phone application (app), to make it more user-friendly. We believe that the function of this observation tool could be further extended/customised to also measure other aspects of teaching practice.

11:00-11:50 | Room 605 (6F)
Sunday Session II
Language Learning: Methodology
Session Chair: Jun Seong Choi

52356   11:00-11:25 | Room 605 (6F)
Mother Tongue-based Multilingual Education: Lessons Learned and Ways for Moving Forward
Maria Cecilia Ycong, Trinity University of Asia, Philippines

This study looked into the implementation of the Mother-Tongue Based Multilingual Education (MTB-MLE) in the National Capital Region (NCR): Makati, Quezon City, Mandaluyong and Marikina in the Philippines. Mixed method was utilized through survey, focus interview and focus group discussion with the principals, Grades 1-3 teachers and students. The study reveals that the MTB-MLE is satisfactorily implemented in the four sampled schools. However, the principals and teachers differ in ratings. The principals rated the building capability, classroom implementation, learning materials and monitoring as Very Satisfactory (4.02 WM); the teachers rated the four domains as Satisfactory (3.56 WM). For the principals, the lowest rating is on the learning materials (3.6 WM) whereas the building capacity (3.0 WM) got lowest rating for the teachers. Learning materials' availability and appropriateness and curriculum revisit are suggested.

53294   11:25-11:50 | Room 605 (6F)
Development of an Immersive Intelligent Tutoring System for Foreign Language Learning with a Maximum Student Agency
Jun Seong Choi, Kyungpook National University, South Korea
Jong Hee Park, Kyungpook National University, South Korea

The student agency is a primary determinant in keeping the student interested and improving retention and applicability of learnt knowledge. We propose a student-directed, immersive Intelligent Tutoring System (ITS) for foreign language learning with a maximum student agency. This student-directed learning paradigm is realized with a pedagogy of 'shepherding' students beyond didactic teaching or even facilitating. We focus on constructing a realistic virtual world to provide genuine pedagogical situations staging the full student ownership of learning process. This realism in learning contexts are pursued in two aspects, the multi-layered, multi-faceted composition of the virtual world and the diversity of situations that unfold in that world. The virtual world is modeled in terms of entities and their interrelationships and layered in the Reality, which in turn is composed of the Physical and Social worlds, and on top of it, the Conceptual worlds of its inhabitants or agents. All the events underlying situations in this virtual world are designed to be not just audio-visually realistic but causally and dynamically connected with each other based on real-world rules. Those events often involve many agents with their respective epistemes. The possible epistemic discrepancy from the reality or between agents could cause as serious consequences as the real or physical problems, leading to a wide range of emergent situations, where an original event is intertwined coincidentally (still naturally) with diverse exogenous events. Our immersive ITS achieves high variability of simulated situations, still won't overly sacrifice authoring scalability. A prototyping is underway to demonstrate our approach.

11:00-12:15 | Room 607 (6F)
Sunday Session II
Higher Education
Session Chair: Yonardo Gabuyo

54461   11:00-11:25 | Room 607 (6F)
The Myth of Artificial Intelligence: Understanding the Dependency of Technologies on Humans
Nompumelelo Radebe, University of South Africa, South Africa

Technologies are oftentimes presented as outside of human control that dictate how human beings should behave. The accelerating impact of the fourth industrial revolution has fueled the idea that human beings will be overtaken by artificial intelligent machine. However, technologies are a human creation and are therefore dependent on humans who determine what they should and should not do. This paper reviews one of the online anthropology modules titled: Anthropological Research and Writing (fourth-year level) that is taught at the University of South Africa (Unisa). It focuses on the assessment practices of the module that are aimed at re-enforcing the values while imparting knowledge. Keeping up with the Unisa slogan: "African university shaping futures in service of humanity", this online module is grounded on the philosophy of ubuntu – an African philosophy that privileges communal and reciprocity. The module uses technology to challenge the conventional pedagogies by encouraging students to learn from each other and with each other. I argue that this approach forges dependency on fellow humans rather than dependence on technology. The paper shows the manner in which information and communication technologies can be used to enhance people's relational values that are human-centred. The module reveals how technology is dependent on the human who dictate what it should transmit. The paper concludes by arguing that in education, when technology is used creatively it can transmit the values that can enhance people's capabilities in learning from each other.

54259   11:25-11:50 | Room 607 (6F)
Standardising Student Feedback to Enhance Assessment in an Open Distance Learning Context
Mirriam Lephalala, University of South Africa, South Africa

One of the key challenges ODL Higher Education institutions in South Africa are required to address is improving the quality of teaching practices to promote student access and success. Aggravating the situation, are the diverse and large student population, the use of English as the dominant language of teaching and learning, and inflexible assessment practices. The significant drop-out and failure rates at undergraduate level, attest to the negative impact these practices can have on student success at first year level, in particular. Thus, teaching teams need to develop innovative practices that model and promote equity and inclusion at the module level. Drawing on the social constructivist theory, this paper reports on a qualitative study that examined how standardising student feedback can contribute to enhancing quality, and in turn, equity and inclusion as one of the ways of improving student success in a first-year English module. The findings reveal that to enhance quality teaching practices that promote equity and inclusion in ODeL requires that various stakeholders at module level should collaborate. As shown in this study, standardising student feedback provides an important mechanism for developing quality teaching practices. Of importance, is that some of the well-established ways of thinking about student feedback in ODeL, challenge lecturers and external markers, to reflect on their own practice and how equity and inclusion can be fostered.

52897   11:50-12:15 | Room 607 (6F)
Do Business Management Graduates Possess the Competencies Needed in Their Job?: A Tracer Study
Yonardo Gabuyo, University of the East, Philippines
Veronica Elizalde, University of the East, Philippines

This tracer study sought to ascertain the employment status of the graduates of the Business Management program from the College of Business Administration of the University of the East and if they developed the skills and abilities needed in their job. To obtain the needed information, a structured survey questionnaire was designed and distributed online to 140 graduates from school year 2010-2017. Findings indicated that of the total number of respondents, 80% were employed and 62% of which were employed professionally. Sixty-five percent (65%) of the respondents were employed in the education, health and service industries; 11% were in retailing companies; 7% were in manufacturing companies; 5% were in transportation industry; and 4% were in the food service companies. On whether the graduates had the competencies required in their respective jobs, 41% of the respondents believed that their course developed in them adequate competencies. Forty-seven percent commented that they developed basic skills needed in their employment; 45% indicated that they learned adequate thinking skills; and 53% responded that they developed adequate social skills to handle the challenges of their job. The researcher highly recommended to the University of the East to conduct tracer studies periodically to keep track of the employment status of the graduates. Measures should also be taken to enhance the skills and competencies of the students while they are in the university.

11:00-12:15 | Room 609 (6F)
Sunday Session II
Student Performance
Session Chair: Juan Fraile

53999   11:00-11:25 | Room 609 (6F)
An Assessment on Student Learning Circle Towards Developing a Framework for JRU College Division Tutoring Programs
Jonathan Chiong, Jose Rizal University, Philippines
Ephraim Jay Villafania, Jose Rizal University, Philippines
Kurt Zander Blanco, Jose Rizal University, Philippines
Myrna Andres Nidea, Jose Rizal University, Philippines
Ana Belen Cuyugan, Jose Rizal University, Philippines

This study assessed the Jose Rizal University's Student Learning Circle as an aid to the student learning and retention. Academic tutoring is a support frequently provided by educational institutions for the under or less prepared students or student at risk (MacDonald, 1991 b). He also added that although tutoring is often showed by different stakeholders as an important intervention for at-risk as well as established students, the paradox is that the lack of knowledge about tutoring undercuts our ability to deliver the service effectively. Highlights of the research validated that Student Learning Circle as a tutoring program affects the student's self concept and academic performance. Also, an evident relationship between the likelihood to finish his enrolled college program thus adding to the narrative evidence that small group tutoring program enhances the retention of college students. Furthermore, based on the data gathered, the researcher developed a framework to address varying concerns of the University regarding the institutionalization of tutoring program on college division. This includes the re-classification of Student Learning Circle as immediate aid and instructional supplementation. The result and conclusion could be recommended to be adapted for other tutoring purposes of the other divisions of the Jose Rizal University.

52852   11:25-11:50 | Room 609 (6F)
An Analysis of Factors Contributing to Variation in Student Performance in Higher Education
Nickie Christensen, Higher Colleges of Technology, United Arab Emirates
Mohamad Saoud, Higher Colleges of Technology, United Arab Emirates
Ahmed Al Rahl, Higher Colleges of Technology, United Arab Emirates

This study uses a linear growth curve modelling approach to investigate the academic achievement of students from government and private secondary schools at a federal multi-campus institute of higher education in the UAE. Longitudinal data from a sample of approximately 1,500 students over an 8-semester period were analyzed. The research examines how and to what extent four variables associate with students' learning performance over time, as measured by semester GPA: variable one is type of high school attended (government or private); variable two is high school cumulative percentage (GPA); the third variable is gender; the last variable is emirate of origin. Longitudinal growth curve models serve to capture the dynamics of educational processes (Luyten & Sammons, 2010); in addition, they help explain long-term contributory factors to outcomes as well as clarify between-person differences and within-person changes (Lin & Liou, 2019). Although such models produce more precise estimates of achievement growth than value-added models (Ortega, Malmberg & Sammons, 2018), their use in examining influences on student knowledge growth is not yet widespread in institutional research (Lin & Liou, 2019). The primary utility of this study is predictive; factors affecting distinct patterns of academic performance will help in identifying precise supplemental support systems that may be required by incoming student cohorts.

53300   11:50-12:15 | Room 609 (6F)
Rubrics Versus Scripts: Instruments for Teachers to Enhance Students' Achievement
Juan Fraile, Universidad Francisco de Vitoria, Spain
María Gil, Universidad Autónoma de Madrid, Spain
Eva Medina, Universidad Autónoma de Madrid, Spain
Ernesto Panadero, Universidad Autónoma de Madrid, Spain

Rubrics and scripts are two tools usually related to formative assessment. Teachers use rubrics to articulate their expectations through a list of assessment criteria, quality levels and their detailed definitions (Reddy & Andrade, 2010). A script is a tool in the form of questions that are presented in such a way that the students have to answer them and follow the path on which a task has been structured (Alonso-Tapia & Panadero, 2010). If implemented correctly, they could lead to significant improvement in academic performance, self-regulated learning skills, and self-efficacy (Panadero, Alonso-Tapia, & Huertas, 2014). In this study, we had 134 participants in three groups (control vs rubrics vs scripts) with approximately 45 students each, belonging to the same econometric course of the second year of the Degree in Administration and Business Management in a public university of Spain. Two instruments were used to measure self-regulated learning: Motivated Strategies for Learning Scales Questionnaire (MSLQ) (Pintrich, Smith, García, & McKeachi, 1991), and a Specific Self-regulation Questionnaire (SSR-Q) created for this study. In the same vein, we developed a questionnaire to measure self-efficacy. Regarding self-regulated learning measures, the interaction intervention x occasion was not significant in both instruments. However, the occasion was significant only for the experimental groups with MSLQ measures, while the three groups got higher levels of specific self-regulation. Concerning self-efficacy, the interaction intervention x occasion was significant with the students who used rubrics, showing a higher level than the control group and the scripts group.

11:00-12:15 | Room 704 (7F)
Sunday Session II
Technology in Education: Mathematics
Session Chair: Jomeo Sumalapao

52995   11:00-11:25 | Room 704 (7F)
Development of Digital Interactive Math Comics (DIMaC) Based on the Competency of Senior High School Students in General Mathematics
Leo Mamolo, Visayas State University, Philippines
Elvira Arellano, West Visayas State University, Philippines

This educational design research aimed to develop a Digital Interactive Math Comics (DIMaC) as an instructional material that is envisioned to meet the needs of the 21st century learners. The study employed the ADDIE framework for instructional material development design. There were 6 instruments used in the study, all of which were validated by experts. In the Analysis Phase, there were 425 students who took the researcher-made General Mathematics competency test. The least learned competencies found were the bases for the design and development of the DIMaC. The students' perception of their learning as they responded to the Rapid Competency Assessment Questionnaire were also used to confirm those least learned topics being included. The initial drafts of the storyline with the Math contents integrated were validated by experts before the electronic illustrations and coding took place. The initial outputs of the DIMaC were revalidated for comments and suggestions before final distribution for classroom use. There were eight Mathematics experts, six information technology experts, and eight education experts who evaluated DIMaC's acceptability to be very acceptable. The DIMaC was then implemented in a Grade 11 class for its usability and found to be "high" in usability as rated by the students and "very high" according to the experts. The study also found out that DIMaC app draws positive feedback for classroom use because of its interesting nature and uniqueness but it is highly recommended for experimental studies to find its effectiveness in terms of students' performance in Mathematics.

53063   11:25-11:50 | Room 704 (7F)
Effects of Cooperative Learning with Dynamic Mathematics Software (DMS) on Learning Inverse Proportional Functions
Kan Kan Chan, University of Macau, Macau
Yi Cheng Zhou, University of Macau, Macau

The study focuses on the integration of dynamic mathematics software (DMS) and cooperative learning into the teaching and learning process of inversely proportional functions. The aim of the study is to investigate the effects of integrating DMS with cooperative learning on students' mathematics achievement using quasi-experimental research design. Students in treatment group learnt inverse proportional functions in cooperative learning groups with DMS while those in control group had typical approach of instruction. Participants are all ninth-grade students in a Macau private school. They were given an achievement test at three stages, namely as pre-test, post-test and delayed post-test. Analysis of students' results showed that the pedagogy of cooperative learning with DMS does have significant influence on students' mathematics achievement.

53601   11:50-12:15 | Room 704 (7F)
Development of a Technologically-Digressed Module for General Mathematics
Jomeo Sumalapao, Carlos Hilado Memorial State College - Talisay, Philippines

This study investigated the learning competencies of the senior high school students in General Mathematics as basis in the development of a Technologically- Digressed Module (TDM). Digression, as a form of enrichment, refers to taking class time to consider a topic that is not in the regular curriculum but relates to one that is. This study was based on the TPACK framework and utilized a design research approach. This research used the ADDIE model with assessment and analysis of the content knowledge of selected senior high school students in General Mathematics of the Negros Occidental High School and technology utilization of teachers through researcher-made tests, design and development, implementation and evaluation of the TDM. Results showed that the top five least mastered topics of the students were the operations and compositions of functions, representing real-life situations using rational functions, and logarithmic functions, distinguishing simple and general annuities and illustrating the different forms of conditional propositions. For technology utilization of teachers, it was found that most uses online resources, designs engaging activities, assesses technological skills of students, accesses digital sources, and demonstrates enthusiasm for educational technology. The identification of the content knowledge and skills of technology use provided inputs to module development. A workshop was conducted prior the implementation of the teacher's module. During the implementation and evaluation phase, the level of acceptability of the TDM was highly acceptable in terms of objectives, content, learning activities, assessment, enrichment, design and presentation. Nevertheless, this study recommends to have additional digressed topics.

Sunday Session II
At-risk & Special Needs Education
Session Chair: Menchie Legaspi

53429   11:00-11:25 | Room 705 (7F)
Evaluating the Anti-bullying Act of 2013 and Its Implementation in Philippine Public Secondary Schools
John Roben Ambas, Bulacan State University, Philippines

School, as a simulation of society, is a place of development for young learners. However, it may also create an environment unhealthy to students caused by bullying -- making it a crucial concern for schools due to victims exhibiting psychological or social repercussions. Thus, the 'Anti-Bullying Act' (RA 10627) was passed into Philippine law in 2013, aiming to prevent such and to further protect learners' rights. Upon its enactment, however, an increasing trend in school bullying became evident despite the measures applied, with social media as a contributor. This status quo may give an impression that the Philippine society as a whole is still struggling to understand the problem and in finding resolutions to this escalating concern. This paper discusses the conceptual challenges bullying poses for school policy efforts; evaluate the impact of the law and its Implementing Rules and Regulations in public secondary schools in the City of San Jose del Monte, Bulacan regarding their anti-bullying policies; and propose recommendations such as 'immediate intervention strategies'. Foreign legislation addressing school bullying also serve as a cross-reference vis-à-vis RA 10627. While this paper seeks to contribute to the existing literature of bullying and strengthening policies against it, it is likewise a fresh attempt at examining the consequences that may arise when conflicts and other legal issues come into place. What is clear is that, there is a need today to properly re-examine the policies protecting the children of the nation in light of the growing understanding that every learner is special.

52876   11:25-11:50 | Room 705 (7F)
The Impact of Computer-based Learning Platform on Mental Health Issues in Indonesian High-School Students
Dea Meitry Dilista, University College London, United Kingdom
Zachary Walker, University College London, United Kingdom

Rationale, aims and objectives: Computer-Based Learning(CBL) platforms that may aid students' learning have grown fast within the past decade. It is assumed that these platforms offer flexibility through custom-paced learning and additional support of educators and materials. However, the knowledge about the impact of CBL on students' mental health is scarce. Therefore, the objective of this study was to review the impact on mental health issues (stress, depression, anxiety, and conduct behaviour) in Indonesian high-school students who actively used CBL. Methods: Three time-point repeated within subjects measurements were conducted with a total of 1,783; 856; and 479 high-school students across Indonesia with different socio-economic status, school years, genders, and domiciles. Findings: The initial finding provides preliminary evidence that symptoms for stress, anxiety, and depression were significantly lower for those who use CBL at least three times per week. In addition, the result from the three time measurement points showed that, despite the stressful period of National Examination and University entrance tests, those who used the CBL more frequently were presented with lower level of symptoms in four mental health measured here. Results suggest that CBL can provide study aids in managing mental health although the long-term impact is still unknown.

53024   11:50-12:15 | Room 705 (7F)
Life Experiences of Students At-risk of Dropping Out (SARDO) Towards the Development of Remedial Module in Mathematics
Menchie Legaspi, Iloilo City National High School, Philippines
Elvira Arellano, West Visayas State University, Philippines

The heart of this study aimed to investigate the life experiences of students at-risk of dropping out (SARDO) and to develop a remedial module in General Mathematics. Specifically, it aimed to determine the life experiences of the SARDO, the factors that contribute to these experiences, and the learning materials that can be developed to address the needs of the SARDO in Mathematics. The study employed the ADDIE framework for instructional material development design. In the Analysis phase, a narrative inquiry was used to determine the life experiences of a SARDO and the factors that contribute to these experiences. This research presented five (5) stories through narrative inquiry. The five respondents were selected through purposive sampling. Results of the study revealed that students at-risk of dropping out are students who have the following characteristics: distracted, lacks focus and self-discipline, has poor time management skills and lacks personal motivation in school. For the family dimensions, they have poor parental monitoring and support, and they belong to a complicated or broken family. For social dimension, this study revealed that relationships with their peers influenced their decision to engage or not engage with their academic studies. For economic dimension, the desire to have an income for themselves and their family affects their school performance. Furthermore, a checklist was employed to determine the competencies that were not learned by the students. Using these qualitative data, a remedial module was designed and developed to cater the needs and characteristics of the SARDO.

11:00-12:15 | Room 707 (7F)
Sunday Session II
Politics in Education
Session Chair: Dollaya Hirunyasiri

54783   11:00-11:25 | Room 707 (7F)
Balinese Young Organization as Building of National Character to Counter Asymmetric Warfare
Luh Putu Ika Primayanti, Indonesia Defense University, Indonesia
Tri Legionosuko, Indonesia Defense University, Indonesia

Bali is an Island that has a diversity of cultures and traditions which is the reason for the rapid development of tourism on the Island. However, one of the negative impacts was the penetration of foreign culture into Bali. In an effort to ward off foreign penetration in Bali, the community uses a youth organization called "Sekaa Teruna". This study aims to analysis how youth organizations build the character of young people through regional culture to counter asymmetric warfare through foreign penetration that can change the ideology of the nation. This research is descriptive analysis using primary and secondary data. In conducting research, primary data collection tools are obtained by conducting interviews and field studies, while to obtain secondary data is done by studying documents or literature. The data analysis technique used in this study is descriptive qualitative. This study was examined using the theory of organizational culture and the concept of national character. The results of the study explain that youth organizations in Bali are able to create a national character to counter asymmetric warfare in Indonesia through conducting art training; training in Balinese and Indonesian languages; Ngayah and community service; Sangkep; and carry out socialization to Primary Schools regarding the importance of tolerance and Tri Hita Karana in community life. For the government of Bali and the Government of Indonesia, the existence of youth organizations in Bali has a positive impact to stem the foreign penetration that has occurred.

53272   11:25-11:50 | Room 707 (7F)
Politics, Textbooks, and the Boundary of 'Official Knowledge': A Case from Hong Kong's Liberal Studies
Wenxi Wu, The Chinese University of Hong Kong, Hong Kong

In Hong Kong, rifts in the political arena can have profound repercussions in education. This presentation explores such a case with Liberal Studies (LS), a core senior secondary subject in Hong Kong. Over the years, this subject has evoked debates among educators and researchers with particular references to the curriculum content about Mainland China. I trace these claims on both sides and propose to understand the complexities of the issue with a textbook-based investigation, which has not been sufficiently considered previously. Highlighting the Education Bureau's deregulated textbook policy for LS, I use critical discourse analysis to compare how the politics and society of Mainland China are portrayed in the official learning material published by the EDB vis-à-vis commercially published textbooks. My findings have shown some significant mismatch between the EDB's and commercial textbooks, as well as competing narratives about Mainland China in different commercial ones. These findings reflect the contradictions in the current debate on LS and politics more broadly; crucially, they also serve as counterarguments against certain existing claims from a single-party perspective. This shows how both the curriculum and the talk around it are susceptible to the sway of political climate and personal beliefs. Theoretically, this presentation seeks to advance our general understanding of the 'official knowledge' proposed by critical educational theorists. This is because, as my findings suggest, the major contention for LS manifests itself less in terms of the predominance of any particular group's knowledge, but a dichotomy of ideas produced in a collective way.

54557   11:50-12:15 | Room 707 (7F)
What Factors Help Reduce Educational Inequality Gap in Thailand?
Dollaya Hirunyasiri, Sodsri-Saritwong Foundation, Thailand
Pinanong Hakard, Sodsri-Saridwong Foundation, Thailand
Kongkiat Kespechara, Sodsri-Saritwong Foundation, Thailand
Suphanut Thattinaphanich, Sodsri-Saritwong Foundation, Thailand
Somying Saithanu, Sodsri-Saritwong Foundation, Thailand
Chonlada Sittitoon, Sodsri-Saritwong Foundation, Thailand
Apansarin Kanarat, Sodsri-Saritwong Foundation, Thailand

Thailand was ranked in 2018 as the World's most unequal country. A research named "Access to Quality Education and Poverty Reduction in Thailand" found the correlation between socio-economic status and access to quality education, meaning the higher the status, the more the access. This paper, therefore, has an objective to verify if prioritization of educational improvement should go for Thailand's provinces with low GPP (Gross Provincial Product per capita). Here we compare Read, Think, Write exam scores of primary school students from 2 contrasting provinces: Chonburi Province (GPP $18,882 / rank – 2nd of Thailand) and Surin Province (GPP $2,136 / rank – 70th of Thailand). Read Think Write exam is an annual national standardized assessment for evaluating reading, thinking and writing skills of every Thai student. The results are unexpectedly surprising. Read Think Write exam scores of students in Chonburi province are significantly lower compared to the counterparts in Surin. For example, the scores of reading skills in Primary 1-6 from students in Chonburi Province VS Surin Provinces are as followed: P.1 - 2.176 VS 2.470 / P.2 - 2.312 VS 2.541 / P.3 - 2.334 VS 2.359 / P.4 - 2.241 VS 2.317 / P.5 - 2.251 VS 2.406 / P.6 - 2.262 VS 2.403. The results show that GPP has no significant correlation with educational results. We still have to study other factors to find out which one impactfully reduces inequality gap in Thailand.

13:15-14:30 | Room 607 (6F)
Sunday Session III
Pedagogy of Art & Design
Session Chair: Natalia Albul

52090   13:15-13:40 | Room 607 (6F)
ABC of Design and its Thinking
Sugandha Gaur, OCAD University, Canada

A tool that helps young design learners understand the complexities of execution and conceptual thinking in a much simpler way. In today's oversaturated design scene, it has become a need of an hour for a design instructor to guide students on the conceptual thinking part of design. In the flow of making great design, many a times design learners tend to skip the ideation part of their projects and directly jump onto the execution. Realizing it as a gap in learning process, and inspired from design thinking and lateral thinking pedagogies, I created a ABC tool to make sure in the process of design-making, thinking never goes missing. It is the only way a designer in the coming time would be able to differentiate from the other designer. This tool helps young designers to break the complexities involved in design making process in a methodological yet simpler way and helps them to identify the main components of design process. This pedagogy encourages every designer stay connected to the ideation part of any design-making process. I have been using this tool since 2016 and it has helped the class projects tremendously.

53704   13:40-14:05 | Room 607 (6F)
Contemporary and Conventional Pedagogical Approaches in the Teaching of Computer-Aided Design and Drafting for Architecture
Jennis Articona, Rizal Technological University, Philippines

This study was anchored from the Connectivism Theory of Siemens (2005) and the Activity Theory of Engestrom (2008). These theories contextualize the interactions between humans and technologies. Hence, the study focused on combining pedagogical approaches in the teaching of CADD 2 for architecture students. The study answered research questions on pedagogical approaches that can be combined to make the CADD 2 content and teaching more interesting; effects of combined pedagogical approaches and traditional methods on the academic performance students; and the difference between the academic performances of the Treatment Group and that of the Control Group. Two hypotheses on academic performance were tested. The study used both the qualitative and quantitative approaches to research. For the qualitative approach, the content analysis design was used. The quantitative approach, on the other hand, applied the evaluation and causal-comparative designs of descriptive research and the nonrandomized control group posttest design of the quasi-experimental type. A posttest was administered to the 30 treatment group students and 31 control group students. The collected data were quantitatively analyzed with the use of frequency, percentage, rank, mean, weighted mean, and z-tests. The study concluded that the pedagogical approaches of blended learning, problem-based, project-based and collaborative learning can be combined to make CADD2 content and teaching more interesting; effective in facilitating teaching and learning benefits in terms of course content, learner engagement and interactivity, graphical competency, technical aspect, learning motivation, and learning outcomes; and pose significant positive influence on student academic performance.

54266   14:05-14:30 | Room 607 (6F)
Learning Pedagogies for Providing Intrinsic Motivation for Interior Design Sophomore and Senior Students Within Studio Environment – A Comparative Longitudinal Study
Natalia Albul, American University in Dubai, United Arab Emirates

The purpose of this comparative longitudinal study is to evaluate how Interior Design Sophomore and Senior student intrinsic motivation is transformed through a client-based learning project. Established by the first stage of a longitudinal study (Albul, 2019) and supported by research (Konkel, 2014; Rodriguez et al, 2016), client-based learning pedagogy increases senior students' intrinsic motivation. The second phase of the longitudinal study was implemented in 2018-2019 at a university in United Arab Emirates. Pre- and post-project surveys were administered to interior design senior students who worked on a hospital design renovation project. The study results demonstrated increase in Sophomore and Senior students' intrinsic motivation by providing meaning to their studio work. In conclusion, the integration of the client-based project as learning pedagogy for sophomore and senior students within the studio environment has increased the students' intrinsic motivation. Furthermore, sophomores have exhibited a higher level of increase in the level of motivation which could be due to the reduced complexity and rigor of the sophomore's project, as well as less pressure and anxiety due to location and familiarity of the client. Seniors reported a high level of responsibility as demands of the client were extensive, and students were treated as professionals. These circumstances may explain the degree in the displayed level of motivation (Gregory and Kaufeldt, 2015).

13:15-14:30 | Room 608 (6F)
Sunday Session III
Teaching Strategies
Session Chair: Intan Nur Fatiha Shafie

52450   13:15-13:40 | Room 608 (6F)
Stacked Learning/No Ceiling Approach/Teach UP
Hope Ross, The Enrichment Lab Academy of Good Stewardship, United States

Stacked Learning' attacks a lesson and requires a student to develop several different methods of completing one assignment. This practice guarantees mastery. The 'No Ceiling Approach' exposes students to the career connected to the lesson so that students fully understand what is needed to work in the particular field. Additionally, they study the industry demand for their career path and whether the career path is male or female dominated. 'Teach UP' reaches and teaches those students who have fallen below their grade level and currently work at the below basic level. Teach UP challenges students to stay focused and stretch their brains to function at a higher level through creative, interactive teaching through benchmark assessments. Students are able to travel with like-minded students and they are taught at a grade level up from where they currently score. Once the high level learning begins, the students are encouraged to soar as high as they can!

53143   13:40-14:05 | Room 608 (6F)
The Effect of Problem-Based Learning Instruction Activities in Linear Equations on Problem Solving Ability Analytical Thinking and Reasoning
Kedchuda Phienukrochon, Srinakharinwirot University, Thailand

The purposes of this research were to compare the before and after Problem Solving Ability Analytical Thinking and Reasoning Ability of Mathayomsuksa 1 students by using method of Problem-Based Learning Instruction with a statistic criterion. The subjects of this study were 30 Mathayomsuksa 1 students in the second semester of 2018 academic year from Srinakharinwirot University Prasarnmit Demonstration School Secondary. They were selected by using cluster random sampling technique. The experiment lasted for 10 periods. The One-Group pretest-posttest design was used for this study. The instruments were the Problem-Based Learning plans in word problems of Linear Equations in One Variable. The data were analyzed by using t-test for dependent samples and t-test for one sample. The findings were as follows: 1. The mathematics learning achievement of problem-solving ability for Mathayomsuksa 1 students after being taught by using Problem-Based Learning Instruction activities in Linear Equations in One Variable were higher than that before being taught and statistically higher than the 70% criterion at the .01 level of significance. 2. The mathematics analytical thinking and reasoning ability for Mathayomsuksa 1 students after being taught by using Problem-Based Learning Instruction activities in Linear Equations in One Variable were higher than that before being taught and statistically higher than the 70% criterion at the .01 level of significance.

53361   14:05-14:20 | Room 608 (6F)
Effectiveness of Field Simulation Problem-based Learning in Medical and Veterinary Undergraduate Students
Intan Nur Fatiha Shafie, Universiti Putra Malaysia, Malaysia
Farina Mustaffa Kamal, Universiti Putra Malaysia, Malaysia
Siti Zulaikha Zakariah, Universiti Putra Malaysia, Malaysia
Wan Nur Syaheera Wan Mohd Sanusi, Universiti Putra Malaysia, Malaysia
Zoharah Omar, Universiti Putra Malaysia, Malaysia

Problem based learning (PBL) is widely utilized as an effective method in teaching zoonotic diseases; aiming to enhance learning through real life experience and collaboration among students from multiple disciplines. The norm of PBL session involve face-to-face interactions at the same place and time however this approach limits the real life exposure among students. Simulation-based learning may improve the learning experience without exposing students to unnecessary risks. Hence, the aim of this study is to assess the effectiveness of field simulation PBL in comparison to traditional PBL setting using a module developed based on One Health concept by examining student's reaction towards the learning and by assessing student's performance. A quasi -experimental design was adopted in this study. Veterinary and medical undergraduate students participated in both exercises and their knowledge and satisfaction were evaluated through feedback survey and questionnaire. The mean satisfaction score of students undergone field simulation was significantly higher than traditional PBL students (P>0.05). Respondents from both programmes found field simulation were more effective and satisfied with overall learning experience, workloads, and facilitators than traditional PBL. Assessment on cognitive domain did not demonstrate significant difference between both PBL groups. In conclusion, field simulation and traditional PBL did not improve the cognitive outcome; however, field simulation enhance positive students' learning experience as they exhibit better attitude towards learning.

13:15-14:30 | Room 609 (6F)
Sunday Session III
Teaching Experiences: Student Roles

Session Chair: Chun Chau Sze

53503   13:15-13:40 | Room 609 (6F)
Understanding the Individual Through the Collaborative Process
Leland Hill, Virginia Commonwealth University Qatar, Qatar

With the diversity of design specialty and the complexity that technology brings into every design discipline, no one student can be an expert in every aspect of their field. Interdisciplinary design collaborations can be a useful approach to the pedagogy that can assist in answering this question to individual students. The methods and processes used within a group dynamic can help a student recognize their strengths and weaknesses and where they can support the collaborative process and contribute to a successful final outcome in a project. The interdisciplinary aspect is important as some of the different outcomes of a project have discipline focused objectives and other objectives can be shared by disciplines. Managing who is best suited for a particular aspect of a project can often be done by a professor, but concentrating on facilitating the students to recognize, articulate and demonstrate their own strengths can lead them closer to an understanding of their individual role within their design field. The experiences from the interdisciplinary collaborations between the graphic, fashion and interior design programs at VCUQatar create situations similar to what students can encounter outside of academic environments. These projects can prepare them to identify their areas of strength and their individual role within Design. As part of the focus of the collaboration, it is essential to have the students formally present their final outcomes and individually comment on where they contributed to the project while at the same time recognizing that the project was made stronger by the collaboration.

53283   13:40-14:05 | Room 609 (6F)
Insight on the Finnish Field of Learning Analytics – Applications and Ethics in Adaptive Education Models
Matias Nevaranta, Satakunta University of Applied Sciences, Finland
Katja Lempinen, Satakunta University of Applied Sciences, Finland
Erkki Kaila, University of Turku, Finland

Learning Analytics provide better means of interaction and guidance between educators and students. Through data, we can elaborate on our understanding of the way a student learns and progresses in the education environment or learning management system. Adaptive and blended learning as modern education models can further emphasize the role of learning analytics: since the teacher is no longer present physically in all (or any) learning scenarios or is partially available, the significance of data collection, analysis and reaction models have become crucial. Moreover, we can also administer pre-emptive measures to ensure continued progression by using the data in prediction models. In this presentation, we describe a learning analytics project between several Finnish universities of applied sciences. The focus is on several empirical experiments conducted in one of the participating universities. We discuss the design and the setup of the cases along with our findings on the effectiveness to student performance and motivation, and teachers and students' perceptions of the experiments. Moreover, the ethical aspect of the experiment is observed along with limitations of the cases. We conclude by providing our lessons learned and by offering some hints and tips for other researchers, who might be conducting similar experiments later.

53640   14:05-14:30 | Room 609 (6F)
An Investigation Into the Efficacy of Students-as-partner Pedagogy in a Singapore University Education Learning Context
Wilson Wen Bin Goh, Nanyang Technological University, Singapore
Hui Min Chon, Nanyang Technological University, Singapore
Chun Chau Sze, Nanyang Technological University, Singapore

In Students-as-partner (SAP), students work in partnership with staff members in higher learning institutions to facilitate deeper learning in students by promoting student engagement. While SAP's impact on student consultants and staff members directly involved in partnership is generally well and widely researched, relatively little is reported about its application on student learning in an Asian university context. This case study reports the efficacy of SAP-produced teaching resource on a cohort of biology major students in Nanyang Technological University, Singapore (NTU). Participants were either exposed to the student-centric (collaborative work between faculty and student) or tutor-centric (produced by the faculty) teaching resource and their test performance and perception of the respective materials compared. Our data shows that students generally prefer tutor-centric material with consistent and higher improvement in test scores when they knew material as tutor-centric compared to the learner-centric alternative. Although SAP is a high-impact pedagogical practice, this study suggests cultural context can confound outcome, and that at least in NTU's predominantly conservative Asian setting, and where collaboration in content creation is concerned between faculty and student, stronger buy-in and gradual introduction is necessary.

Sunday Session III

International Education: Teaching Abroad & Migrant Teachers

Session Chair: James Lassegard

53107   13:15-13:40 | Room 704 (7F)
Navigating Marginality, Negotiating Difference: Migrant Teachers in Singapore and their Experiences of Professional and Social Integration
Peidong Yang, National Institute of Education, Singapore

Education in a globalized world is characterized by greater interdependence between countries and cultures in knowledge and talent. One manifestation of such interdependence is the international mobility of teachers. Migrant teachers' experiences of professional and social integration can have important implications on the values, harmony and diversity of the host education system, and the receiving society in general. Yet, in existing educational and sociological literatures, teachers of migrant backgrounds remain a relatively under-studied topic. This paper addresses this research gap by looking at migrant-background teachers working in mainstream schools in the Southeast Asian city-state Singapore. The paper draws on a study that has to date collected 147 survey responses and qualitative interviews with 29 informants. Findings suggest that younger migrant teachers in Singapore experience greater senses of precarity associated with immigration status and perceived marginality in career progression. Migrant teachers brought up and/or educated in Western liberal environments have more notable experiences of discomfort with dominant values, culture, and practices in the local education system. The teachers carefully manage and pragmatically negotiate with such differences by adopting an openness to mainstream values/practices while also finding small spaces of liberty and creativity, albeit within acceptable boundaries. It is argued that while the Singapore education system benefits from migrant teachers' diversity in teaching expertise (esp. in case of foreign language teachers), the room for value diversification seems much more limited. Migrant teachers negotiate their professional integration by downplaying the differences arising from their migrant backgrounds while stressing their role as state-employed educator.

53233   13:40-14:05 | Room 704 (7F)
Pathways and Barriers to Mental Health Service Utilisation by Croatia and Bosnia-born Migrants in Melbourne, Australia
Gabriella Karakas, Royal Melbourne Institute of Technology, Australia
Val Colic-Peisker, Royal Melbourne Institute of Technology, Australia
Sharlene Nipperess, Royal Melbourne Institute of Technology, Australia

This qualitative research aims to answer fundamental and interrelated questions pertaining to mental health support access by Croatia and Bosnia-born migrants in Melbourne, Australia. Empirical data to demonstrate the current attitude towards mental health care utilisation within the selected population group was obtained, as well as educational, gender, cultural and migration trajectory differences that may effect pathways or create barriers to service utilisation. The experiences of mental health service providers, Croatia and Bosnia-born community members, and Croatia or Bosnia-born clients who have previously utilised the existing mental health services was explored through semi-structured, in-depth interviews. Thematic analysis, driven by a grounded theory approach, was used in order to analyse data. The collection and analysis of mental health data is central to moving towards equity in health, and the improvement of service utilisation through education and awareness. This research will help to promote the understanding of limitations to access of mental health support to migrant community groups, making it relevant to academics, mental health organisations, policy makers and the general public—who are increasingly concerned and aware of the importance of inclusion and mental health care accessibility. This study aims to work towards overcoming the barriers to mental health service utilisation identified by the research participants by suggesting practical, structural and systematic initiatives- particularly pertaining to the increase of mental health literacy and education- that can improve the accessibility and effectiveness of current mental health services.

53176   14:05-14:30 | Room 704 (7F)
The Integration of Foreign Faculty in Japanese Higher Education
James Lassegard, Hosei University, Japan
Michio Tajima, Nihon University, Japan

The Japanese government has in recent years been making efforts to "internationalize" its education system by promoting study abroad, and by emphasizing the teaching and learning of foreign languages, in particular English. One of the objectives of these endeavors is to raise the quality and global reputations of Japanese universities. However, despite several programs to create "Super Global Universities" and to cultivate "Global Human Resources" the results have been mixed. One aspect of Japanese international higher education that has not received as much attention is the presence of foreign national academics, whose number is considered low when compared with other developed countries. Indeed, this indicator has been a factor positively contributing to the higher ranking of universities in other Asian countries, such as Singapore and Korea. Previous research on international faculty has examined such factors such as how well they are integrated into their work environments, with the underlying presumption that higher levels of integration contribute to overall work satisfaction and motivation toward one's career. The researchers in 2019 conducted a large-scale multi-item questionnaire survey of foreign faculty working in Japanese universities. This paper focuses on the quantitative data findings, and uses descriptive statistical analysis to determine the degree that foreign faculty perceive themselves integrated, valued, and supported in their work environments, and which factors most significantly impact satisfaction with working and living in Japan.

13:15-14:30 | Room 705 (7F)
Sunday Session III
Language Learning: Computer Assisted
Session Chair: Gina Oracion

52608   13:15-13:40 | Room 705 (7F)
Modified Lab Rotation Model: A Blended e-Learning Approach to Improve Student's Conceptual Understanding of English Verb Tense and Aspect
Lovely Rollaine Cruz, Pinagbuhatan Elementary School, Philippines

In language Education, verb tense and aspect is one of the most difficult lessons in elementary grade. For the past three years, S.Y. 2015-2016,2016-2017 and 2017-2018, English verb tense and aspect is consistently included in the least mastered skills topic in Grade Five English. This study aimed at investigating the use of Modified Lab Rotation Model in improving the conceptual understanding of English Verb tense and Aspect. This model is based on the concept of Blended E-Learning Approach, an integration of traditional "chalk-talk" and online learning in order to provide educational opportunities that maximize the benefits of each mode of delivery and thus effectively facilitate student learning. This paper offers a comparative analysis of students' conceptual understanding and achievement in the Blended E- Learning Approach and traditional classrooms. A pre-test- post –test design was used, utilizing quantitative and qualitative methods of research.Data triangulation plan was used to further verify the results of the pre and post test. The results revealed substantial improvements in the technical aspect of language and achievement of students from Group B. It also showed that students who used the Modified Lab Rotation Model were more likely to contribute higher perceptive ideas during class discussion. However, further analysis indicated that the Modified Lab Rotation Model is not certainly superior over the traditional "Chalk-talk" approach since we included chalk-talk in the MLRM processes,thus not all lesson can be blended.

54509   13:40-14:05 | Room 705 (7F)
A New Self-adaptive Separate Grammar Test for L2 Online Young Learners
Yan Jiang, PandaABC, China

Grammar, a core component of the language system, is usually tested through writing and speaking in major language tests for young second language (L2) learners, such as Cambridge YLE. This, however, can not be aligned with students' learning needs in later stage of acquisition. Moreover, the form of grammar, which is a better reflection of learners' explicit knowledge of grammar, should deserve more attention in language tests. Taken together, a proposal that grammar should be tested separately arises. Thus, this paper introduces a new self-adaptive grammar test for online young L2 learners. As mentioned above, using correct form of grammar is vital for L2 young learners. Assessing grammar through four skills are too vague and inaccurate to provide comprehensive diagnosis of grammar knowledge and skills. Hence, the author decides to test grammar separately. Meanwhile, considering the methods and purposes of online assessment, the question type we choose in this new test is multiple-choice, through which we can know students' specific weakness and strength. Furthermore, many tests used to assess students' English level is unified. Few tests can test students' actual level. This new grammar test is self-adaptive which can provide students with different questions based on students' last question's performance. It can assess students' performance more accurately. Besides, this self-adaptive test also can save a lot of testing time. Therefore, students' grammar performance can be accurately and effectively tested.

54387   14:05-14:30 | Room 705 (7F)
Computer-assisted Language Learning (CALL) Program: Its Pedagogical Relevance in the 21st Century
Gina Oracion, St. Mary's College of Tagum Inc., Philippines

The purpose of this study was to explore the views and opinions of the identified college students on the pedagogical relevance of the CALL program. This study was anchored on the Experiential Learning Theory of Carl Rogers who stated that learning is facilitated when the student participates completely in the learning process and has control over its nature and direction. Aligned with the experiential learning process was the inclusion of Computer Assisted Language Learning (CALL) for language teaching and learning. Ten (10) students participated in the in-depth interview. They were representative participants from each of the ten courses offered in St. Mary's College of Tagum Inc, Davao del Norte, Philippines. Interview data were subsequently analyzed to facilitate the development of themes and core ideas. The results revealed that the participants find the CALL program as a meaningful tool to enhance their language skills as they are made to be exposed to certain communicative environments. This led them to the gradual acquisition of certain linguistic skills, making them equipped with the necessary knowledge as they enter the global village. With the findings, a clear-cut policy in the implementation of the CALL program must be taken into consideration in order to reinforce its positive impact to the development of skills among students. The CALL program is indeed a groundbreaking and innovatory approach toward a pedagogically-sound language training program for global advancement of the students in the 21st century.

13:15-14:30 | Room 707 (7F)
Sunday Session III
Online Education
Session Chair: Raymond Ting

53330   13:15-13:40 | Room 707 (7F)
Online Versus Classroom Learning in Pharmacy Education: Student's Preference and Readiness

Qi Ying Lean, Universiti Teknologi MARA, Malaysia
Long Chiau Ming, Quest International University Perak, Malaysia
Chin Fen Neoh, Universiti Teknologi MARA, Malaysia
Yuet Yen Wong, Universiti Teknologi MARA, Malaysia
Maryam Farooqui, Qassim University, Saudi Arabia
Siti Nur Fadzilah Muhsain, Universiti Teknologi MARA, Malaysia

The teaching and learning approaches have constantly changed to meet the needs of new generations. Among the delivery modes, online learning is famously known for its flexibility whereas classroom learning promotes collaborative and interactive learning. Our study aimed to compare pharmacy students' performance and preferences towards classroom and online learning. An online learning module was developed for an independent subject focused on basic patient counselling skills for pharmacy students of a Malaysian public university. Based on cumulative grade point average, a total of 93 students were stratified to classroom or online learning groups. After attending the lecture in the classroom or online learning, they completed a knowledge test and a survey for their preferred learning methods. There was no significant difference for the knowledge scores between the 2 groups (p= 0.89). The online learning (mean score = 70.3 ± 11.3) was found as effective as face-to-face learning (mean score = 71.7 ± 10.7). The majority of students preferred blended learning where the use of online approach could supplement face-to-face classroom learning to increase their understanding towards a learning subject. Students perceived that it is important to have the opportunity to interact with lecturers and peers within classroom in order to motivate them. They also expressed concern over online learning as they could be easily distracted with social media when going online. With the choice of computer and the Internet to improve existing teaching and learning methodologies, selecting the right combination of strategies is crucial in matching students' learning needs.

53581   13:40-14:05 | Room 707 (7F)
Investigating Relationship Among Learning Self-Efficacy, MOOC-Satisfaction and MOOC- Loyalty of MOOC Learner using Bagozzi's Self-Regulation Model

Kah Heng Loh, Taylor's University, Malaysia, Malaysia
Zaim Azizi Abu Bakar, Taylor's University, Malaysia
Nur Ainif Omar, Taylor's University, Malaysia
Khai Rol Low, Fairview International School, Subang, Malaysia

This research aims to examine the relationship among Learning self-efficacy, MOOC-satisfaction and MOOC-Loyalty of the credit-earning MOOCs at Taylor's University. 952 Taylor's University students from March 2018 Semester responded the online survey. The online questionnaire included 10-item of learning self-efficacy, 6-item of MOOC-satisfaction, and 5-item of MOOC-Loyalty. It also included another 2 factors which affected the learning self-efficacy and MOOC-satisfaction: 9-item on Ease of learning and 5-item on Quality of MOOC content. The Cronbach's alphas for Learning self-efficacy, MOOC-satisfaction and MOOC-Loyalty were 0.979, 0.959 and 0.964 respectively while for Ease of learning and Quality of MOOC content were 0.962 and 0.964 respectively. Pearson correlation coefficient between pair of variables among all the variables were obtained. The results of zero order correlation analysis showed a strong positive correlation between the predictors and outcome variables. However, a higher order partial correlation was also performed and results showed that MOOC-satisfaction mediated the relationship between Learning self-efficacy and MOOC-Loyalty. The research findings provided positive impact to lecturers who plan to convert from traditional teaching pedagogy to MOOC mode as Malaysian students have higher degree of MOOC-loyalty and they were in favor of continuing to take up the credit bearing MOOC throughout their study at Taylor's university. Besides, it also alarmed the university administrator to provide the best infra-structure for the MOOC platform and best quality of MOOC content so as to raise the MOOC-satisfaction which enhance the MOOC-loyalty.

51749   14:05-14:30 | Room 707 (7F)
Teaching and Learning Effectiveness of Two Online Programs

Raymond Ting, North Carolina State University, United States

More than a quarter of higher education students (28%) are enrolled in least one online course (Online Learning Consortium, 2016). Advantages of online programs include: flexibility in time and location, saving travel time, and self-pace learning (Clingerman & Gernard, 2004; Schwitzer, Ancis, & Brown, 2001). But few literature and evidence about effectiveness are found especially in counseling education. This study explored the reasons why students select the two online graduate counselor education programs (n=68) at a public major university in Southeastern U.S.A. Also, the teaching and learning effectiveness were examined. The online programs are delivered through Moodle, Zoom, etc. Teaching methods emphasize on practice including short teaching video, role-play, case-study, and video demonstration. In results, the student surveys show that articles, current events, virtual classes, Moodle Forum and emails were most important learning tools. In the end of the program, student evaluation show that half of the students thought the online classes were better than previous on-campus classes. Also, the most effective learning tools were: (1) virtual meeting (Zoom) including break-out rooms and virtual discussions, and (2) Moodle learning activities, including forum, current events, and film clips. Research limitations include one institution study, and small sample. However, the findings of the current study provide preliminary evidence of online counseling education. The findings could inform how to improve online teaching and learning. More studies can replicate this study and examine other issues of online learning.

Sunday Session IV

Education & Employment

Session Chair: Louis Tsz Wan Cheng

53731   14:45-15:10 | Room 603 (6F)
Career Interest of Grades 7 and 8 Students Among Catholic Schools in the Diocese of Iba, Zambales
Rey Enciso, Columban College, Philippines

This study determined the students' interest of grade 7 and grade 8 students among Catholic Schools in the Dioceses of Iba in terms of the different curricular tracks of K-12 Program. The researcher utilized the descriptive survey method of research and survey-questionnaire, observation and interview as well as documentary analysis for data gathering, and statistical analyses were done using Frequency and Percentage. It was found out that majority of the students in ACSDI, majority of them wanted to specialized academic track particularly Business, Education and Engineering. Among the Technical-Vocational Livelihood track specializations, most of the respondents wanted to specialized Computer Programming and Fashion Accessories and. The least choice of the respondents is Plumbing and Masonry. Among the respondents, in terms of Sports Track, most of them wanted to specialized First aid, Coaching and Fitness sports. In Arts and Design Track, majority of students chose Music and Dance. Most of the respondents prefer the Academic Track and Technical-Vocational Livelihood Track. Some of the recommendations given include- offering tracks that are based from the interest of the students who will be the Senior High School. The ACSDI schools, their respective guidance centers and the parents should have a close participation in the decision making process of the students. Also, a parallel study should be conducted in wider perspective to further validate the results of this study.

52180   15:10-15:35 | Room 603 (6F)
The Role of Higher Education in Socio-Economic Development in Myanmar: External and Internal Perspectives
Zin Mie Sharr, University of Oslo, Norway

Political metamorphosis in Myanmar with the mandate of National League for Democracy paved the way for major structural reforms in various sectors. Unsurprisingly, higher education sector is one of them to undergo drastic changes since it is regarded as one of the key sectors in Myanmar's socio-economic development. And, efforts are made to reengineer the sector with the involvement of intra and international organisations. In this paper, three aspects are discussed to understand the overview of recent reforms and changes of higher education system in Myanmar: the role of Public Higher Education in Myanmar's Development Policy, triangle relationship between ministries, external agencies and public higher education institutions, formal and living autonomy of public HEIs in relation to national development. The first two aspects focus on the "external" dimension of the relationship public higher education institutions in Myanmar have with national government and international agencies and the last point addresses the "internal" dimension of the universities and their adaptation on national development initiatives. The methodology included review and analysis of scientific papers, policy documents, reports and other relevant sources. In summary, the findings reveals that Myanmar is heading towards decentralisation and increasing autonomy for universities by allowing universities to directly interact with local, intraregional and international stakeholders. However, the implications of enhanced autonomy in university leadership remains as an empirical question. Future researchers are recommended in the area of university adaption towards organisational change in align with recent development .

53105   15:35-16:00 | Room 603 (6F)
School to Work Transition for Young People with Disability in Vietnam
Huong Nguyen, Curtin University, Australia

There is little research into school to work transition programs for young people with disability either in Vietnam or other developing countries. With around one million new entrants to the workforce each year, young Vietnamese people with a disability face particular and substantial challenges around obtaining a job. This paper draws attention to the intricacies and challenges for a Vietnamese school to work transition program aimed at providing suitable vocational pathways for young people with impairment to their hearing and vision. Information collected through in-depth interviews, focus group discussions and a survey questionnaire ensured rich and authentic understandings of the complex barriers and facilitators to the program achieving success. Using Bronfenbrenner's Ecological Systems Model as a conceptual framework, findings indicated that key facilitators of successful school to work transition were (i) confidence and motivation to work, (ii) peer relationships/friendships and networks among young people with disability, (iii) hopes and aspirations, (iv) motivation and engagement, and (v) preparedness for work. Barriers included: stigma and discrimination related to disability (ii) limited social networking with peers (iii) fear to start working and (iv) concerns about jobs for those who are about to graduate, and (v) short term training leading to limited acquisition of the necessary communication and work skills prior to working.

54302   16:00-16:25 | Room 603 (6F)
Does Work-integrated Education (WIE) Enhance Learning Outcomes for Capstone Project Students?
Louis Tsz Wan Cheng, The Hong Kong Polytechnic University, Hong Kong
Jacqueline Wang, The Hong Kong Polytechnic University, Hong Kong
Christine Armatas, The Hong Kong Polytechnic University, Hong Kong

Recently, Asian universities place great emphasis on practical training and connecting classroom theory with workplace application through a Work-Integrated Education (WIE) component as graduation requirement for undergraduate programmes. Therefore, we propose to examine the relationships between WIE and capstone project (i.e., final year project) learning outcomes, which emphasize critical thinking, and analytical skills. Ideally, WIE could enable students to improve their critical thinking dealing with real world problems and all the way to achieving good learning performance of capstone project. Using Data from 684 students majoring in Accounting and Finance, this study examines the relationship between capstone project's learning outcome and Work-Integrated Education (WIE). For students who put in extra effort (in terms of hours) in no-pay WIE, their learning performance on capstone project is significantly higher. In addition, For students who engaged in international exchanges and extra no-pay WIE hours, their capstone performance is significantly better as well. These findings suggest that non-academic but relevant experience in terms of WIE help students to improve their critical thinking and analytical skills, which are main components of learning outcomes of capstone project. In addition, there are additional performance effect for students who engage in both WIE and international exchanges. Our findings would also benefit academic programs and universities which attempt to improve students' critical thinking as a graduate's attribute through a proper understanding of the key factors and students' characteristics, leading to a successful outcome of the capstone course.

14:45-16:25 | Room 604 (6F)
Sunday Session IV
Higher Education: Curriculum Design
Session Chair: Andre Bechuke

54097   14:45-15:10 | Room 604 (6F)
Towards the Decolonisation of Student Learning: a Durban University of Technology Writing Centre Practitioner's Introspection
Gift Mheta, Durban University of Technology, South Africa

In recent years, the South African Higher Education landscape has experienced an upsurge in demand for a decolonised curriculum from students who generally feel that the current curriculum is decontextualised and does not fulfil their educational needs as it is largely Eurocentric. This has culminated in often violent protests by students at almost all South African universities, including the most known and widely publicised #Rhodes-must-fall at the University of Cape Town. Despite the trail of destruction left behind by the protests, one positive outcome was that South African universities were galvanised into relooking their curricula and developing of institutional policies on decolonisation. This paper is based on the reflections-for-action of a Durban University of Technology (DUT) Writing Centre practitioner. The DUT Writing Centre was established in 2013 to provide academic support around reading and writing to students and staff as a means of redressing the inequalities of South African education and also to help build the understanding that at a university, reading and writing are essential skills that need development, not only for achieving academic success but to develop employable graduates (Govender, 2014). This paper presents innovative ideas on how the DUT Writing Centre can contribute towards the decolonisation agenda. It looks at how the Writing Centre practice can be transformed to facilitate contextualised learning.

54006   15:10-15:35 | Room 604 (6F)
From the Classroom to the Community and Back: The Development of a Community-based Research Model for Contemporary Higher Education
Tai Chong Toh, National University of Singapore, Singapore
Siok Kuan Tambyah, National University of Singapore, Singapore

Community-based research is a collaborative research approach to address a community-identified need that can also be used as a pedagogical tool. In this study, we describe the development of the Capstone experience module, an academic module at a residential college in an Asian university. This module creates an unique learning environment through the formation of a tripartite partnership among undergraduates, educators and the community to collaboratively engage in research to effect social change. Through the 'inward' constructive alignment of the assessments to the module Intended Learning Outcomes (ILOs) and the 'upwards' mapping to the broader educational aims (i.e. Programme ILOs and Association of American Colleges and University Essential LOs), we were able to validate that this module fits coherently with the broader curricular approach to scaffold the students' personal development within the university. Through a hermeneutic analysis of the reflections of students in their learning journals, we demonstrate that such an approach can benefit the community partner and provide opportunities for the undergraduates' development of critical competencies. These results accentuated how community-based research projects hold significant pedagogical value for contemporary higher education.

54562   15:35-16:00 | Room 604 (6F)
University Curriculum Development for Students' 4C Skills
Moon Jeong, Korea University of Technology and Education, South Korea

Current university education is destined to survive in an ever-fast changing society by nurturing future talents who are able to lead technological advancement and societal innovation. In addition to these abilities of individuals, 4C skills are increasingly paid attention to education stakeholders as necessary soft skills needed in the Fourth Industrial Revolution time. Considering the complexity and uncertainty of future society, educators and educational policy makers identify 4C skills - creativity, critical thinking, communication, collaboration – as a distinction between dehumanized future life and humans. This study examines the educational concerns of 4Cs skill development in one Korean university that aspires to prepare their students for soft skills. K university, which is composed of 80 percent of engineering departments, has been proud of the remarkable record of graduates' employment contrary to country's high rate of youth unemployment in recent decades. With the big pressure of industrial change, so-called the Fourth Industrial Revolution, K university recently set up its educational mission as a creation of self-directed learning environment and developed its curricula with 4C concepts (formal and extra-) to enhance its students' soft skills. By introducing the recent curriculum development of K university, I first expect to show the mechanism of university interaction with society. And then, I will investigate whether the effort of university curriculum development truly allow students to enhance designed soft skills or not in this case study. I hope my research findings can contribute to university education by bringing the idea of learner's new skills in the future society and its educational endeavors.

53031   16:00-16:25 | Room 604 (6F)
Honours Students' Articulation and Success at Masters Level in a South African University: Research Grounding Dilemma in the Curriculum
Andre Bechuke, North West University, South Africa
Sharon Paulse, North West University, South Africa

A close examination of how Honours programmes prepare students to articulate and succeed at Master's level is a cause for concern at universities in South Africa. Research at Honours level is expected to expose, prepare and equip students with basic skills needed to conduct research at Master's level and beyond. However, at the University selected for this study, most students who articulate from Honours programmes to the Master's level do not complete their research projects within the prescribed timeframes. The purpose of this paper is to report on a research which analysed the curriculum of the research components of Honours programmes at a university to determine their nature and structure in equipping students to articulate and successfully complete their master's studies. Data was collected by reviewing the postgraduate yearbooks of all faculties of the university and content and textual analyses used to analyse the data. The findings revealed lack of compliance in many programmes with the Higher Education Qualification Sub-Framework's standard of research at Honours level. Absence of a discrete research component was noticed in several programmes while others did not comply with the complete scientific research cycle expected at Honours to prepare students for studies at Master's level. The discrepancies revealed in the curriculum of research components are a contributing factor to challenges faced by students when they take up Master's studies. It is, therefore, recommended that the curriculum of research components of Honours programmes be revisited and possibly re-curriculated to ensure compliance and to strengthen the research according to "POWER".

14:45-16:00 | Room 605 (6F)
Sunday Session IV
Language Learning: Tools for Learners
Session Chair: Harumi Kashiwagi

54565   14:45-15:10 | Room 605 (6F)
Design of English Conversation Edutainment Game for Japanese University Students

Fatin Amirah Mohamed Yusoff, University of Toyama, Japan
Masahiro Satou, University of Toyama, Japan
Hayato Suhara, University of Toyama, Japan

Japan is a country where most of its people cannot communicate in English despite having English education in schools until the university level. This is because Japanese English education mostly focuses on grammar and reading with very little oral practices in class. Moreover, the environment in Japan is not conducive to the improvement of English skills. This situation burdens and bores the students, resulting in students giving up learning English. Thus, in this study, we have developed an English conversation simulation game with an edutainment approach, aimed to help the Japanese improve their English conversational skills. Users can practice speaking in English with Artificial Intelligence (AI) chatbots available in the system. The system implements game elements such as survival and quests to keep the users engaged and entertained while practicing speaking in English at the same time. We have integrated free and open-source libraries to develop the graphics, voice-recognition, AI chatbots, and the text-to-speech system of the game. The English contents of the conversation available are common topics such as hobbies, food, and family. To ensure that the design and contents of the game are suitable for our target group, we did a test-play with Japanese university students as the participants. Then, a questionnaire was distributed. It was found that the sound recognition system needs to be improved. Improvements are made to the game based on the results.

53399   15:10-15:35 | Room 605 (6F)
Exploring Learners' Experience in Using a Corpus-based Word Learning App

Li Li, Singapore Centre for Chinese Language, Nanyang Technological University, Singapore
Sim Lucy, Ministry of Education, Singapore

Learners' word learning experience is valuable indicators for both the teachers and the learning resource developers. This article introduces a study on exploring Singaporean children's Chinese word learning experience while using a designed word learning app. The corpus-based app is serving as a Chinese word resource that may help students in understanding unknown Chinese words encountered in everyday life, and is also designed to recommend grade-appropriate words to students for formal or informal learning of Chinese words. Students from grade three to grade five in four Singapore primary schools are invited to experience the app and provide feedback. Both logging data and app using actions will be recorded via the backend platform of the app. Through the analyses on learners' logging data, we seek facts about students' habits of using the app for word learning. Analysing in students' visiting auctions will show us the possible different learning experience of students from different grades. These data will draw the links between the Chinese word learning behaviour and the designed app functions among young learners, which are vital for resource developers to improve the product, and also important for Chinese teachers to improve teaching.

54405   15:35-16:00 | Room 605 (6F)
A Prototype System for Practicing English Speaking

Harumi Kashiwagi, Kobe University, Japan
Min Kang, Kobe University, Japan
Kazuhiro Ohtsuki, Kobe University, Japan

This study develops a system for practicing English speaking. When students speak in English, it can be difficult to express their intentions in the moment, even when they know the correct words and phrases. To come up with the correct English term smoothly, it is important to focus on language use based on language knowledge they have acquired. By using probable linguistic situations in which target words and phrases are used, our system checks and provides information about the words and phrases learners can use. In this study, we developed a prototype system and conducted an experiment to investigate the following research questions: (1)Does the prototype system run properly and provide questions and save the log data as expected?; (2)When we check the learners' answers in real time, how many evaluation items and evaluation levels are appropriate?; and (3)How should we display the results of the evaluation for visual comprehension? Concerning the first question, the results of the experiment show that the system runs properly and saves the log data. For the second question, the results suggest that a few evaluation items and three evaluation levels are preferable to check the learners' answers in real time. Results for the third question suggest that a color-coded table could help visually interpret the learners' results. In this table, English sentences grouping probable linguistic situations are classified according to the accuracy rate of the questions, such as less than 50%, 50–80%, and more than 80%.

14:45-16:25 | Room 607 (6F)
Sunday Session IV
Learning Experiences: Student Character & Leadership
Session Chair: Nelca Leila Balisado-Villarin

51228   14:45-15:10 | Room 607 (6F)
Contribution of Character Strength to Academic Achievement of Psychological Student on Jenderal Achmad Yani University

Niken Cahyorinartri, Jenderal Achmad Yani University, Indonesia
Haifa Khoerunnisa, Jenderal Achmad Yani University, Indonesia
Ayu Riana Sari, Jenderal Achmad Yani University, Indonesia

Academic achievement becomes one of the most important indicators to evaluate of learning outcome of a student in an academic setting. Academic achievement can be seen in cumulative achievement index on college grade. The way students think about their grade was seen as character strength that students have. Character strength is a positive character that manifests in the range of individual behavior (thoughts, feelings, and/or action). The aim of the study to find out which character strength that contributes to cumulative achievement index of psychological student UNJANI. Character strength consists of 24 positive characters that can be measured with VIA-IS. The college student cumulative achievement index is obtained from the university based on the value of the courses that have been taught by students. In this study researchers conducted data analysis using multiple linear regression calculations. The researchers found that there were 3 character strengths that most contributed to the achievement of the student cumulative grade index. The characters are curiosity, teamwork and leadership. With this character, students can appreciate their role in learning and taking responsibility for the results of their learning. On the character of curiosity, if students can focus their attention on things that are their responsibility, it will help strengthen the teamwork character that students have. Besides that, it is also found that the character of leadership is a character that is related to the determination of goals. This leadership character was also found to have a contribution when it came along with the character of curiosity and teamwork.

53634   15:10-15:35 | Room 607 (6F)
Exploring Social Media as a Communication Tool for Student – Athletes and Their Formators

Joram Kim Corcuera, University of Santo Tomas, Philippines

What are the roles of social media in the formation of student-athletes? To answer this question, 20 formators, specifically professors, coaches, and athletic directors, from select institutions, namely: University of Santo Tomas (UST), San Beda University (SBU), and Philippine Normal University (PNU) were interviewed regarding their views and opinions on using social media as a communication tool in forming the character of the student-athletes. This study identified the roles of social media in the formation of student-athletes using Blumler, Gurevitch and Katz's (1973) uses and gratifications theory (UGT) as a conceptual framework to explore how student-athletes and their formators use social media to fulfill and satisfy their needs. The researcher based the theoretical framework of the study on the core values of three selected educational institutions. Interview transcripts were analyzed using typological analysis following protocols from Hatch (2002). Results of the study showed that formators in UST, SBU, and PNU use social media to form student-athletes who have a strong character inculcated with positive morals and virtues. Results also revealed that formators in select institutions use social media to provide human needs in accordance with the UGT typologies of media use (Katz et al., 1973), which are cognitive, affective, personal integrative, integration and social interaction, and escapism. Findings of the study can be used as a basis for crafting modules and policies on social media education that will allow social media users to maximize the benefits of using social media, while minimizing its harm.

53219   15:35-16:00 | Room 607 (6F)
To What Extent Enhancing Emotional Intelligence, Through Performing Arts, Help Global Leadership in Schools?

Namiko Holderman, Aoba-Japan International School, Japan

Enabling students to understand optimal well-being can be effected through fostering a concept called "global leadership". The rapidly changing globalized world demands interdependent skills such as effective human connection and maintaining a positive relationship to facilitate decisions with others, and cultivating social relationships. At the same time, the individual must also be able to make decisions on her/his own and be able to evaluate competing ideas. This requires a suite of self-management and critical thinking skills. Research has shown that Global Leaders tend to demonstrate high Emotional Intelligence (EI); it is key to develop both independence and interdependency. EI is the disposition and ability to perceive, control, and evaluate emotions in oneself and others. Fostering EI within a school curriculum maximizes students' well-being, creativity, critical thinking skills, and supports stronger academic outcomes. EI can effectively be taught through Performing Arts, however, the arts, especially the performing arts, are often the first to be lost to budget cuts. This paper investigates utilizing Performing Arts to foster the development of Emotional Intelligence, and student independence and interdependence. It also explores strengthening connecting other academic subjects with Performing Arts to successfully design interdisciplinary units to achieve high academic and Emotional Intelligence results.

54586   16:00-16:25 | Room 607 (6F)
Sanghabihan: Service Learning Experience on Student Leadership and Youth Development

Nelca Leila Balisado-Villarin, De La Salle University, Philippines

This paper highlights the value of service-learning in the leadership curriculum of University College students. The program Sanghabihan is envisioned to provide a service-learning opportunity that focuses on youth formation and empowerment. It hopes to enhance the formation of student leaders geared towards service to others and the nation in general. This introduces a strategy that allows teaching and learning to become more meaningful for both the student leaders and the communities they serve. The University intends to contribute to responding to that need of enhancing programs that allow students to learn leadership values and management skills as they respond to community needs. It has three program components, servant leadership, leadership principles, and community engagement. The implementation of the program for 2017 and 2018 allowed select student leaders to immerse and engage with one of the severely affected areas by Typhoon Haiyan and remote community of Tubabao Island in Guiuan, Eastern Samar. The evaluation intended to generate data to give a better appreciation of the program's various aspects. The areas measured included an understanding of service program, motivational factors, and impact on leadership. It was also recognized that there is a need to look into service-learning beyond academic course curricula, but also in the formation of student leaders in the University. The study also showed that there is a greater sense of appreciation on the concept of Lasallian mission and their roles as student leaders.

14:45-16:25 | Room 608 (6F)
Sunday Session IV
Assessment

Session Chair: Michael Telafici

53053   14:45-15:10 | Room 608 (6F)

Assessment for Learning in Indonesia: Exploration of Convergent and Divergent Teachers' Assessment Values and Practices

Mohammad Arrafii, University of Leicester, United Kingdom

Assessment for learning (AfL) has been considered as a substantial element of curriculum and assessment reform around the globe. Indonesia just begins the journey into such reform initiative. The reform implementation however took a top-down approach without a careful consideration of teachers' thinking about the reform which are influential to their practices. This research explores teachers' assessment thinking and practices to support the implementation of assessment reform. Specifically, the research explores and identifies gaps between teachers' values and practices of assessment and compares these to teachers in England (James & Pedder, 2006) and ALIC survey (Warwick et al. 2015). A survey questionnaire was used to gather data from 343 secondary school teachers. Participants share relatively homogenous demographic backgrounds with a roughly equal number of male and female participants. For the purpose of this paper, exploratory descriptive statistics was used to discover patterns and emerging gaps between teachers' assessment values and practices. The research indicates that teachers highly valued assessment practices that are associated with the effort of exploring and improving student learning. They also placed performance and curriculum-oriented practices as important, while least valued some practices that are linked to the promotion of student agency in learning. These findings confirmed existing knowledge of assessment values of teachers in England and ALIC context. In contrast with England and ALIC teachers, the study reveals small assessment value-practice gaps, suggesting a congruence between what assessment practices teachers thinking are important and what they enact in the classroom. Theoretical and practical implications are elaborated.

54600   15:10-15:35 | Room 608 (6F)

Development of Hots-based Reading Literacy Scoring Device Model in Cultural Context

Vismaia Sabariah Damaianti, Indonesia University of Education, Indonesia
Yeti Mulyati, Indonesia University of Education, Indonesia
Yunus Abidin, Indonesia University of Education, Indonesia
Rosita Rahma, Indonesia University of Education, Indonesia

One of the factors strongly suspected to cause Indonesian junior high school student's low reading literacy ability is that HOTS-based reading literacy scoring model has not been applied in their studies. This reality causes students to not get used to answering questions that are analytical, critical, creative, and problem-solving questions. Besides, the scoring instrument being used up until now does not regard to Indonesian cultural context when culture is such an important vehicle in strengthening the identity of a nation. In order to solve this problem, a HOTS-based reading literacy scoring device model has been made through this research. This research was carried out with a research-and-development method. The subjects were junior high school students of three locations in Indonesia; Sumatera, Java, and Bali. The data obtained were processed with quantitative and qualitative data-processing techniques. The result shows that this scoring device model increases Indonesian junior high school student's reading literacy ability effectively. The product of this research has never been developed previously, hence it can be implied in higher importance to be used effectively in the learning process of reading.

54457   15:35-16:00 | Room 608 (6F)

Embracing Holistic Assessment and Naturally Emerging Evidence: How assessment of prior learning has informed in-class assessment practices

Richard Mitchell, Otago Polytechnic, New Zealand
Adrian Woodhouse, Otago Polytechnic, New Zealand

The Bachelor of Culinary Arts (BCA) has had both traditional, in-class and workshop-based, recognition of prior learning delivery modes since its inception in 2011. Recognition of prior learning is part of the 2010 New Zealand Qualification Framework, which acknowledges that skills and knowledge emerge "from formal learning toward a qualification or informal learning, independent study, work, and life experience" (NZQA 2016). To this end, Otago Polytechnic offers a range of recognition of prior learning programmes (from certificates and diplomas to bachelor's degree) that assess the naturally emergent evidence of prior learning. The BCA recognition of prior learning programme uses a mix of professional portfolio work, design exercises and written evidence-gathering tasks (including theory-informed critical reflection) to help learners to demonstrate that they meet the graduate profile outcomes for the degree. This evidence is assessed holistically and the learners explore their evidence from several perspectives so that they invariably present a highly sophisticated unpacking of their praxis. The delivery of this recognition of prior learning programme has resulted in a questioning of the more traditional in-class assessments and informed the recent redevelopment of these practices. This paper explores three aspects of the application of the philosophies of assessment of prior learning to traditional classroom assessment: 1) the redesign of assessment rubrics; 2) the implications for critical reflection and; 3) how and why embracing naturally occurring evidence has been important. The presentation concludes with some caveats and suggestions for further development and evaluation of the efficacy of this.

50997   16:00-16:25 | Room 608 (6F)

The Bell Curve: A Real World Approach to Rubrics and Writing Assessment

Michael Telafici, Texas A&M University at Qatar, Qatar

Why do university writing instructors feel pressure to use rubrics in grading student writing? Rubrics can reduce subjectivity, student complaints, increase validity and reliability of grades among multiple graders, and protect students from our own capricious grading. However, the authors' decade of technical/professional writing experience runs counter to this classroom method of assessment. Indeed, this very method of assessing writing can be counter to what students need in order to succeed in the workplace – an ability to think, work, and write where rubrics are rarely if ever given and subjectivity is a given. This case study presents a series of feedback exercises in which university technical writing students respond to assignment exemplars authentically. It uses surveys, anonymous votes, group discussions, and other student feedback to determine if their authentic reactions to examples of language, document design, and presentation of information conform broadly to widely held academic and/or workplace standards. Using the concept of the bell curve, this study inquires whether a normal distribution of authentic student response validates grading norms, while encouraging students to develop agency, creativity, and critical metacognition about writing. Student surveys, interviews, and assignment examples will be presented. This initial research will provide the basis for a method for more authentic assessment and feedback which may validate both widely held norms and instructor experience, and also raise student awareness and/or acceptance of a degree of inherent subjectivity in workplace and technical writing.

14:45-16:25 | Room 609 (6F)
Sunday Session IV
Teaching Experiences: Leadership for Diversity & Inclusion
Session Chair: Maria Guajardo

53952   14:45-15:10 | Room 609 (6F)
Leadership and Motivation for Improved Academic Performance in Schools in Low Socio-economic Contexts
Raymond Emekako, North West University, South Africa
Jan Heystek, North West University, South Africa

This paper examines motivational practices and engagements of schools in challenging contexts – through strategies developed by principals with the members of the school management team – to improve academic performance. Schools within this contexts that are now performing were purposefully selected in an interpretive paradigm. In each of the sampled schools, individual interviews were conducted with the principal as well as a focus group with the school management teams and identified teachers. The main findings reveal that school labelling as a public notice was identified as the main push towards intrinsic motivation, especially when positive results in learner performance are achieved. Labelling and control were internalised and converted to intrinsic motivation which culminated in extra classes, teaching collaboration, monitoring, and team building as main strategies used through the adoption of a change process. The principal's role as initiator of the change was crucial in the change process. This research contributed to the understanding of school improvement in a specific context of low socio economic areas using motivational theories. The findings thus provides leadership at schools with the necessary information and examples of what can be done to get teachers to improve performance in a challenging context. In other words, the use of extrinsic as well as intrinsic motivational actions can provide the school leadership with the necessary guidelines to implement in their schools. The limited literature which links motivation to the process of school improvement is advanced from this perspective of low socio economic context in a developing country.

54058   15:10-15:35 | Room 609 (6F)
Providing Broadened Educational Opportunities for Students Through Effective School-Based Management Practices
Jhon Hayden Bale, Teach for the Philippines, Inc., Philippines
Valerie Vir Farol, Teach for the Philippines, Inc., Philippines

In 2001, RA 9115, also known as the Governance of Basic Education Act, ratified the Department of Education's implementation of a framework called School-based Management (SBM) system. The 6-dimension framework aims to empower school principals and give them management authority in addressing administrative and curricular concerns of their schools through contextualized and responsive programs and policies (Abulencia, 2012). In 2018, more than 15 years after its implementation, World Bank reported that although the general program outcomes of SBM seem satisfactory, the inability of principals to raise resources and the different forms of implementation of SBM were the major challenges in effectively operationalizing SBM across all schools in the Philippines. It is in this context that the researchers utilized a case-based inquiry method in different schools in the Philippines to identify common effective SBM practices of schools and the characteristics of principals who have successfully implemented SBM, specifically on dimensions 3 and 6: stakeholder mobilization and resource management. It is through innovative leadership and taking calculated risks that principals were able to foster strong, sustainable partnerships with different external organizations that together they are able to provide additional educational opportunities for students and capacity-building activities for teachers yielding positive learning outcomes.

53065   15:35-16:00 | Room 609 (6F)
Ethnicity and the Leadership Practices of Effective Public School Principals in Northern Mindanao, Philippines
Nelson Tantoco, De La Salle University Manila, Philippines

The region of Northern Mindanao in the Philippines is ethnically diverse and this is mirrored in its school population. It would be to the advantage of the schools if the demographics of school principals reflected this diversity. The reality is that they do not. In evaluating the leadership practices of effective public school principals in Northern Mindanao, it is posited that their ethnicity surfaces in their leadership practices and that it positively influences their ability to improve schooling for their learners. For our case studies, four effective public school principals from Northern Mindanao are purposively chosen and interviewed. Their ethnicity is from groups native to Mindanao and they have proven their effectiveness as principals. The study aims to identify their leadership practices and single out specific practices targeting the needs of ethnic groups in the school, evaluating their impact in the learners' schooling. The study reveals that the principals share common leadership practices in setting goals, touching hearts, promoting unity, and empowering others. More importantly, they employ practices that create a healthier school environment for the students from these ethnic groups, improving student learning and providing them an inspirational role model to look up to and follow. In essence, the ethnicity of the principals enables them to be more understanding of the students' experiences, thus creating the potential to enhance student learning. This is a criterion that ought to be considered in the appointment of principals in the ethnically-diverse region.

53830   16:00-16:25 | Room 609 (6F)
Educational Leaders and Global Learning: Advancing Diversity and Inclusion
Maria Guajardo, Soka University, Japan

Educational leaders are tasked with leading ethnically diverse learning communities, as demographics change (Langer and Moldoveanu, 2000). New models are needed to courageously increase inclusivity and access in the field of education. Global learning can be engaged to embrace ethnic diversity, moving from color blindness to color insight. To deconstruct the cultural patterns and beliefs that separate individuals in a limiting fashion, a learning environment that fosters curiosity and self-awareness is necessary (Boyce and Magee, 2018). How can global learning and global citizenship education in higher education be a catalyst for embracing ethnic diversity and promoting inclusion? To address this question, a case study was conducted to explore how global learning promotes self-awareness of cultural norms, beliefs, and traditions. The use of dialogue and reflection were educational strategies utilized to support students in expanding their awareness, of themselves and of the world. The study included domestic Japanese students and international students, from ten countries, in a semester-long course. Student action proposals were evaluated for themes of cultural diversity and inclusion. Findings reveal that through structured dialogue, reflection, and active learning, students expanded their perspectives and self-knowledge. Leaders in the 21st century have been handed a complicated and culturally rich world, and thus viewing diversity from a more strength-based perspective can contribute to effective leadership in education. Acknowledging the possibility of different perspectives supports individuals to build shared understanding. Future research and practice can be strengthened by embracing the complexity of the intersection of global learning, leadership, and culture.

Sunday Session IV

Teacher Training

Session Chair: Evangeline Aguilera

54079   14:45-15:10 | Room 704 (7F)

Role Competencies of MTs in Selected Public Secondary Schools in the NCR: Basis for Continuing Professional Development

Jay Macasieb, San Juan City Science High School, Philippines

The study delved deeply in determining the role competencies of master teachers in selected public secondary schools in the National Capital Region of the Philippines during the school year 2016 – 2017 using an IPCRF–Based Evaluation Tool for Master Teachers. This was carried out through the separate evaluation of the principals and teachers based on the seven (7) domains/competency standards - Instructional Competence, Personal and Professional Growth, Community Linkages, Research Capability, Curriculum Enrichment and Plus Factors; and established whether there was any significant difference between the evaluation of the two groups of respondents on the role competencies of MTs. The study utilized the descriptive method of research. There were 97 principals and 3901 teachers who comprised the total 3,998 respondents from 97 schools in 15 divisions in the region. The data gathered were treated with various statistical tools like frequency, weighted mean, standard deviation, Z-test for 2 independent samples and other tools. The findings of the study revealed that both principal and teacher-respondents evaluated "Satisfactorily" the competencies of the MTs in terms of the six domains while rated them "Fairly" in one out of the seven domains. Furthermore, there were "significant" differences in their evaluation in four domains and "no significant" differences for the other three domains. Ultimately, the result served as basis for a proposed Continuing Professional Development Program.

54488   15:10-15:35 | Room 704 (7F)

Gaming Practices and Issues of Undergraduate Students in a Teacher-Training University

Simon So, The Education University of Hong Kong, Hong Kong

Background: In Chinese society, we have an idiom, "Diligence has its reward; play has no advantages (qin you gong; xi wu yi)." Unlike the western cultures, Chinese parents, especially those non-gamers, are worried about their children's excessive game-play will impact on their academic performance. This paper focuses on gaming practices and related issues in gaming behaviors, parents against playing games, academic performances, and well-being of undergraduate students in a teacher-training university. Methods: The study was conducted among undergraduate students in the university taking a general education course since 2015, including eight classes of mostly pre-service teachers. Participation in the study was voluntary. The survey included a battery of questions related to their hours of gaming practices in school days and weekends, parents against playing games, impact of gaming on their health or mind, academic performances in public examination. We categorized the student gamers and aggregated their academic performances. Descriptive and inferential statistical results were utilized to evaluate their gaming practices and to establish any association on various issues. Results: A total of 292 students participated in the study, out of which 221 (72.3%) were gamers. "Light", "moderate" and "heavy" gamers were 17.0%, 56.5% and 26.5% respectively. "Low", "middle" and "high" academic results were 34.9%, 32.9% and 32.2% respectively. No association was found between gamers and academic results (Chi-Square(4) = 1.82, p=0.77). Parents were against them playing games with the distribution of "Never (14.2%)", "Little (40.5%)", "Occasional (37.1%)" and "Often (8.2%)". Other statistics will be reviewed in the full paper.

53876   15:35-16:00 | Room 704 (7F)

Development of a Creativity Framework for Filipino In-service and Pre-service Professionals

Dhanna Kerina Bautista-Rodas, Independent Scholar, Philippines

The study explored and documented creative output of 12 Filipino in-service teaching professionals from one university and creative output of 191 Filipino graduating students as pre-service professionals from three universities in Baguio City, at the Cordillera Administrative Region of the Philippines in the areas of Hospitality and Tourism, Engineering, Architecture and Information Technology. Research questions aimed to determine the categories of creative output of the two sets of respondents and the factors that motivated such creative output. Data was processed with thematic analysis through memoing, open and axial coding, borrowed from the Grounded Theory approach on the validated questionnaire consisting of 26 questions and the conduct of a focus group discussion. Frequency count and percentage were used to treat the answers of the 191 pre-service professionals about daily creative activities. Data gathered with the Intrinsic Motivation Inventory of Ryan and Deci, was processed using the one-way repeated measure analysis of variance (ANOVA) and t-test. An emergent creativity framework was developed based on data analysis.

53378   16:00-16:25 | Room 704 (7F)

Preparing Future K-12 STEM Leaders

Evangeline Aguilera, University of Texas San Antonio, United States
Timothy Yuen, University of Texas San Antonio, United States
Juan Manuel Niño, University of Texas San Antonio, United States

Our university's nationally recognized exemplary principal preparation program focuses on transforming teachers serving in urban, culturally, linguistically, and economically diverse communities within the south Texas region into school leaders who advocate for social justice, equity and excellence in public schools. These aspiring school leaders are at the forefront of creating more equitable access to Science, Technology, Engineering, Technology (STEM) education in communities with high minority and low socio-economic status populations, and thus are instrumental in creating more pathways to broaden diversity in STEM. This research investigates two cohorts of teachers' understanding of STEM and perceptions of what it means to be an innovative and transformative STEM leader in K-12 schools. Findings of this research show that teachers recognize the need for further integration of STEM into the core content areas for all students, the need for both school leaders and teachers to gain deeper understanding of STEM related fields, create a shared STEM vision for their campuses, make connections with expertise outside the classroom to support the schools, and foster interest in STEM within both the teachers and students. This research constructs a profile of what teachers who are aspiring school leaders perceive to be the knowledge and skills needed to move a campus toward excellence in STEM. The study highlights innovative practices for integrating and reinventing STEM education at all levels (K-12) so that it attracts, supports and sustains the participation of underrepresented minority students in their respective school districts and across the state.

14:45-16:25 | Room 705 (7F)
Sunday Session IV
Learning Experiences: Student Perceptions
Session Chair: Cristilita Lumilan

53362   14:45-15:10 | Room 705 (7F)
The Feasibility of Using Task-based Language Teaching for Purposive Communication
Jesusa Francisco, Bulacan State University, Philippines

With the pilot implementation of the new General Education Curriculum (GEC) last Academic Year 2018 as per Commission on Higher Education (CHED) Memorandum Order No.20 series of 2013, various pedagogical approaches and strategies have been employed by different universities and colleges to meet the objectives of each subject. The Task-Based Language Teaching (TBLT) has been used by the faculty of Bulacan State University as the main approach for Purposive Communication, which is one of the core subjects in the GEC to realize its objective, "to communicate proficiently—orally, in writing and through communication technologies" (CMO No.20, series of 2013). The study was an attempt to determine the feasibility of using TBLT as an approach for Purposive Communication. A total of 183 first year students from Bulacan State University were included in the study. Six (6) different courses which took Purposive Communication in the second semester of Academic Year 2018-2019 were involved. Using descriptive method, the students' perceptions regarding their understanding of the phases and features of TBLT were surveyed. The results showed that students generally agreed on the aspects of TBLT; however, the faculty had to improve on how TBLT could be properly and meaningfully implemented to fully realize the desired objective of the subject. The findings of this study could provide an impetus for developing more relevant and better designed activities that will serve as valuable inputs in the enhancement of the curriculum and instructional materials for Purposive Communication.

52856   15:10-15:35 | Room 705 (7F)
Oral Feedback When Learning English as a Foreign Language: Perceptions of Grade 11 Students in Indonesia
Junita Duwi Purwandari, The University of Auckland, New Zealand
Helen Dixon, The University of Auckland, New Zealand
Eleanor Hawe, The University of Auckland, New Zealand

Feedback can take several forms having both positive and negative impact on learning. Within the educational context, there has been considerable amount of research investigating written feedback, however, few studies have examined oral feedback in the context of classroom. Also lacking are studies that focus on teachers' and students' perceptions about and include the student voice regarding the role and nature of such feedback. This case study aimed to generate an in-depth understanding about students' perceptions of oral feedback in the context of learning English as a foreign language. More specifically, this study uncovered students' perceptions about the purpose and the nature of oral feedback, how students engaged and responded to oral feedback, and how students perceived their role and the teacher's role in the feedback process. Data were collected from two semi-structured interviews with eighteen Grade 11 students from three different schools in Indonesia (six students per school). Findings from data analysis revealed five salient themes: purpose of feedback, what the feedback is about, source of feedback, response to feedback, and what makes good feedback. These findings add to our understanding of oral feedback from the perspective of students.

53220   15:35-16:00 | Room 705 (7F)
Determining Student Perceptions and Attitudes of Non-accounting Majors Towards Accounting at the University of Technology in South Africa
Mothemba Cecilia Phohlo, Vaal University of Technology, South Africa

As part of qualifications requirements, non-accounting students enroll for Accounting as a non-core subject. About 80% of the students enrolled had no accounting exposure. This poses an interest to investigate how they perceive the subject, to enable educators to keep the students focused and interested in the subject that they find difficulty to relate to in order to reduce the increasing failure rate and ensure that students complete their respective courses within the shortest possible time. Research in accounting has mainly focused on accounting majors. Only limited research has sought to establish the perceptions and attitude of non-accounting majors with or without any accounting exposure before matriculation. The study revealed that majority of the students considered the subject not to be important in their future careers. They do not understand why the subject is part of the curriculum and should be excluded, the subject is time consuming and irrelevant to their careers. They lacked confidence and enthusiasm in accounting thereby dislike the subject. ANOVA established significant differences between students with and without accounting exposure in relation to confidence in the subject, interest, importance of the subject in their future careers and daily lives. As a result, there should be separate subject delivery for students with and without accounting exposure as the beginners in accounting need more attention as they lacked confidence and interest in the subject and have a negative attitude towards the subject.

52885   16:00-16:25 | Room 705 (7F)
Why Do Students Shift to Another Degree Program: The Case of Engineering Students Shifting to a Business Program
Cristilita Lumilan, University of the East, Philippines

This research sought to identify the factors why some students of the University of the East in the Philippines shifted to another degree program. The study investigated cases of Engineering students who shifted to a business course from school year 2015 to 2018. The objective of the inquiry was to find the reasons why Engineering students change their program and what was the experience of the students when they shifted to a new degree program. The data were gathered by the use of a survey questionnaire distributed to 184 Engineering students. The findings revealed that there were three main reasons behind the shifting: 38% said they obtained either low grades or failing grades in Engineering subjects which indicated that respondents were not performing good in the course; 31% found the Engineering subjects very difficult; and 23% felt that they don't want to continue in the course anymore. When the students shifted to another course, it is interesting to note that students were able to enhance their academic performance and skills.The study also looked into environmental factors that could have affected the performance of the students while they were taking up Engineering course.The researchers, however, recommended that before students decide to shift to another program, they should consult their parents or seek the advice of the school guidance counselor in choosing the degree program they intend to pursue. Furthermore, the researchers also recommend that the Department of Engineering of the University organize activities for the students in order to enrich and strengthen their mental, emotional and social abilities.

14:45-16:00 | Room 707 (7F)
Sunday Session IV
Language Learning: Japanese as a Second Language
Session Chair: Yuji Obataya

54532   14:45-15:10 | Room 707 (7F)
Improvement of Problem-solving Models for Japanese Writing and Development of Teaching Materials for Japanese Writing Education
Norimichi Takemura, Tokyo Institute of Technology, Japan
Toshiki Matsuda, Tokyo Institute of Technology, Japan

We are developing gaming materials for international students to apply the thinking process necessary for writing to various types of writing. The gaming teaching material was designed based on the "Japanese writing problem solving model" created based on the " process model of writing" of Hayes and Flower (1980), using the "Warp and Woof model of problem solving" of Matsuda (2016).The teaching materials introduce the knowledge for writing at the necessary stage of the writing process while explicitly associating the "good points of sentence" necessary for the task with the text structure. However, the teaching materials that have been developed so far have not provided sufficient guidance on how to come up with the idea of writing to achieve the required writing quality. Therefore, in this study, we reviewed the Generate Alternatives process of the Japanese writing problem solving model and improved the teaching materials to explicitly deal with the method of realizing "good points of sentence". Specifically, the learner's native language knowledge and Japanese composition knowledge were organized using the 5W1H frame of knowledge and explicitly associated with the learner's writing process. In the teaching materials, we introduced knowledge such as connection methods to connect each component. At the same time, we examined the Japanese writing script, which is the optimal Japanese writing procedure.

53827   15:10-15:35 | Room 707 (7F)
Socio-cultural Aspects in the Japanese Language Teaching Methodologies
Anna Lelenkova, Saint Petersburg University, Russia

In the age of globalization learning a foreign language can be used as an important mean of cross-cultural understanding. Nowadays, there have been a lot of changes in the social life of people in different countries. Therefore, the language teaching and learning requires a comprehensive approach. That is especially true for the Japanese language, because, being a native language of one of the most closed nations in the world, its proficiency may be useful not only for communication, but also for better understanding the culture and mentality of the Japanese people. In the case of Japanese the teaching process can be divided into several subjects, such as grammar, writing, spoken language, the Japanese media, translation of Japanese fiction, historical text etc. Each of these subjects has its own specifics of learning and aims at developing translation or interpreting skills, as well as skills of writing a research paper or working with documents etc. However, learning just the language is not enough for building an intercultural dialogue. It is the task of lecturers to encourage learners to study geography, history, including the current political and economic situation, culture and ethnography, as well as customs and specifics of daily life of the Japanese people. The proper knowledge of the Japanese realities helps to make an adequate translation, what is especially important for state-to-state relations issue. Consequently, working out the appropriate Japanese teaching methodologies, taking into account socio-cultural factors, is finally aimed at building up the constructive dialogue with the Japanese nation.

54524   15:35-16:00 | Room 707 (7F)
A Study of the Mutual Phonetic Resemblance between Japanese and Chinese: Quantification of the Difficulty of Phonetic Cross-comprehension
Yuji Obataya, Geneva University, Switzerland

This study investigated mutual phonetic resemblances of Chinese ideograms in both Japanese and Chinese by analyzing a database of 1078 kanji (Chinese ideograms in Japanese) extracted from the two volumes of the Japanese grammar textbook *Minna no Nihongo*. The aim of this analysis was to help learners of Chinese (or of Japanese, or both simultaneously) from non-kanji backgrounds to learn how to read the kanji and pronounce them correctly. First, basic phonetic resemblance was ascertained at 21.07% [1] according to the result of a survey of nine native Chinese speakers teaching Chinese to Japanese students; seven of these teachers were at N1 level and two at N2 level of the Japanese-Language Proficiency Test (JLPT). Second, since most kanji have multiple readings (on'yomi [Chinese reading] and kun'yomi [Japanese reading]), the rate of use of on'yomi in the 1078 kanji was calculated at 59.72% [2] by factoring the frequency of all words (total 9233 words) that contain these kanji and are classified in the JLPT word list. In comparison with the shape resemblance (71%) and semantic resemblance (about 90%) analyzed in our previous two studies for the same database, which signify that most characters have the same form and meaning in both language, this relatively low rate of phonetic similarity (13 %, judging from values [1] and [2]) visualizes a significant gap between "interdependence" of the shape and meaning aspects, and the "independence" of the phonetic aspect; this emphasizes the importance of phonetic cross-comprehension for learners of Japanese and Chinese.

Notes

Virtual Presentations

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

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52219

Learning Independence Through QFEmirates: A Case Based Inquiry into Framework and Deeper Learning Inter-dependence

Lakshmi C Radhakrishnan, American College of Dubai, United Arab Emirates
Mario Pallada, American College of Dubai, United Arab Emirates
Mallika Ramanathan, American College of Dubai, United Arab Emirates

The paper aims to inquire the interdependence between frameworks based learning and deeper learning to examine how learning independence can be achieved by students through proper application of Qualification Framework of Emirates (QFE). To ensure validity of the research, a case based approach with two courses of two different universities has been taken for the study. The courses chosen for the study included Organizational Development course at ECMIT College in Dubai and Project Management Course by American College of Dubai. Both the courses are of undergraduate level; Level 7 of the QFE developed by the National Qualification Authority (NQA) of UAE .The pedagogy included a range of techniques such as traditional lectures, case studies, and team based projects, which are used as assessments apart from other innovative learning techniques such as flip-class and think-pair-share. The course learning outcomes are aligned with the QF Emirates, as required by the UAE Ministry of Higher Education (MOE). While in ECMIT the impact of QFEmirates Framework based learning has been assessed through two groups one, who had to be a part of traditional learning pedagogy against those who were exposed to improved framework based learning experience. Project Management course learning outcome (CLO) achievement and overall student satisfaction with the course is investigated through a survey. The study also intends to enlighten the linkage between cognition, metacognition and approaches to learning that could support self-regulation, independence and reflection. Specific, practical and appropriate recommendations for improvement of course content, and pedagogy is presented.

52264

Just-in-Time Flipped Classroom in Grade 10 Physics

Levenia C. Bendal, De La Salle University, Commonwealth High School, Philippines
Joseph Scheiter, Brothers of Christian Schools, Philippines

This study aimed to determine the effects of Just-in-Time Flipped Classroom in the performance and attitudes of Grade 10 students in Physics in a public school. For seven weeks, the JiTFlipped methodology for teaching Physics was implemented in particular topics of Electricity and Magnetism, and Waves and Optics. The researcher utilized the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model as the framework of the study. A total of 93 valid respondents were grouped into three: (1) lower 3rd , (2) middle 3rd, and (3) higher 3rd. The instruments used were carefully chosen and fitted to the approach, as well as the lesson plan and activities for the whole operation. The local government Physics Periodical Test from the previous school year was used to measure the students' achievement, while the Colorado Learning Attitudes in Science Survey (CLASS) in Physics was used to measure their learning attitudes. Weekly journals and interviews were also analyzed to support the data gathered in CLASS. The students from the Lower 3rd group showed a high increase in performance in Physics compared to the results of Middle 3rd and Higher 3rd groups with a 10.31 and a normalized gain value of g= 0.087. This showed that JiTFlipped Classroom was more effective in enhancing the performance and achievement in Physics of the students that belong to the Lower group, given by the bigger values in t- test and Hake's normalized gain. The results of this research provide sufficient evidence in the effectiveness of JiTFlipped Classroom.

52260

Mindful Music Instruction as a Strategy for Music Listening

John Roger Obja-an, Assumption College, Philippines

The purpose of the study was to describe how mindful music instruction strategy helps in the assessment of music listening skills and how it makes the students understand and appreciate western classical music. Mindful music instruction is a concept as described by Anderson-Todd and Langer where constructs of mindfulness can be done thru direct instruction to the listener. Creative Music Listening Response by Kratus was used to describe successful music responses. Quantitative and qualitative descriptive research methods were used. The study was implemented to nineteen (N=19) all girls' students in Makati City. Mindful music instruction was given before listening to music listening selections with selections raging from classical to romantic styles. Findings show that the students described a clearer image/emotion/story of the music with thorough explanations from beginning to end. These images/emotions/stories were well supported with descriptions of musical elements although accuracy and consistency of the terms needs to be given attention. The summary of scores of each student showed that seven had proficient level of music listening response while twelve have advanced level. Results of student self-assessment checklist, self-reflection and interview validated the facts of the findings as students show more appreciation and understanding of western classical music and become more aware and attentive to the music they listen to. Results of students' checklist seem to agree on the inaccuracy of using musical elements. Recommendations were given in the further use of mindful music instruction in music education in different settings, across different levels.

52028   11:25-11:50 | Room 607 (6F)

Developing a Knowledge Based Economy Through Enhancing Management of Vocational and Technical Education in Nigeria

David Okoli, Federal College of Education (Technical) Umunze, Nigeria
Chinedu Ochuba, Federal College of Education (Technical) Umunze, Nigeria

The need to enhance management of vocational and technical education (VTE) and developing a knowledge based economy in Nigeria need not be over-emphasised. A knowledge based economy has four (4) key elements namely; economic and institutional regimes, education and skills, innovation system and information and communication technology (ICT). This paper brings to the fore a realization of the fact that the performance of the products (outputs) of the education system is an index of the inputs into the system. For students to have enterprising and innovative mindset, it is important to expose them early enough to practical development in transiting towards a knowledge based economy in order to adapt to the upgrading of the educational system while in school, this is directed towards achieving a nation that is duly informed about the benefits of providing needed skill training for employment and self-reliance. Moreso, this paper examined those things which are necessary for the achievement of well established technical and vocational education in order to advance to a more knowledge based economy and the development of manpower for easy productivity in the vocational and technical education sphere. With all these in focus and practiced, the Nigerian economy will stand a chance of fighting unemployment and poverty to the barest minimum. Also, the strategies to adopt in enhancing management of vocational and technical education were discussed, and some recommendations were made.

53020
Supervising Educational Leaders: Using a Lever Long Enough to Improve Student Achievement
Tony Pellegrini, Southern Utah University, United States

Most school boards agree that putting a good principal in every school is the key to improving classroom instruction. "Good principals" are not that easy to find, and great ones, even harder. Great principals are not born, they are made; and the key process for growing great principals, from moving them from "effective" to "highly effective" in place is providing them the support and encouragement they need within the context in which they serve. A powerful but underutilized resource for achieving and sustaining district-wide improvement is the supervision of principals. If skilled principals are essential to good schools, then skillful ongoing supervision and development of principals is a critical lever for school improvement. Educational Administrator Supervision is a missing link in efforts to improve whole districts. Almost no freshly minted principal can be good enough in as many areas as it takes, no matter how good the preparation. It's like expecting a second year medical student to enter professional practice at a high level, having skipped two years of medical school, internship and then residency. (We do the exact same thing with novice teachers.) We must therefore surround the new principal with a set of forces and experiences that enable continuous learning and also make the principal, and those who support him/her, accountable for it.

53191
Principals' School Turnaround Strategies Under the Influence of Neoliberal Reforms in the Philippines
Alea Ann Macam, University of Waikato, New Zealand

The quality of Philippine public education has deteriorated in recent years. Despite the implementation of educational reforms such as Governance in Basic Education Act in 2001 and K-12 system in 2012, the Philippine educational system continues to have poor student achievement, high dropout rates, and high repetition rates. As a response to this, this study explored the phenomenon of school turnaround, a quick and dramatic improvement of chronically low-performing schools in a short time. This research investigated the strategies of five public elementary school principals from Lipa City, Batangas in the Philippines, who had successfully achieved school turnaround in the areas of National Achievement Test, dropout rates, and repetition rates. In doing so, it also investigated the wider political and economic forces that influence principals in their strategic responses. The findings of this study identified three strategies that the principals' implemented to facilitate school turnaround. These include: 1) "teaching to the test", 2) establishing community engagement, and 3) implementing "user pays" reforms to enhance financial contributions. The findings also demonstrated that the principals' strategic decision-making to achieve school turnaround is strongly influenced by the wider neoliberal reforms in the country, such as accountability, decentralisation, and "user pays". Finally, this thesis argued that some principals tend to reproduce these neoliberal ideologies, but, in some ways, have also responded by transforming these neoliberal agendas to benefit and enhance the outcomes of students in their schools.

53249
Oral or Poster only: On the Lack of Acceptance of Virtual Presentations at Language Education Conferences
Michael Brown, Kanda University of International Studies, Japan

There are many reasons that travel, particularly air travel, to conferences may be unwanted or impossible. Such reasons include, but are not limited to, physical disability, lack of financing, political restrictions, and concerns over climate change and ecological sustainability. Nonetheless, presenting at conferences is often key to academic and research networking, disseminating one's research or innovative practices, and career progression. Thus, there is a tension between the reasons one may have for not traveling and the perception of the need to present at conferences. The option of virtual presentations could dissolve, or at least ameliorate, this tension. This presentation analyzes the acceptance of virtual presentations at more than 200 conferences in the field of English Language Teaching and adjacent fields. The proportion of conferences that permit virtual conferences is reported, and for those conferences that do permit virtual presentations, it is reported whether the format is synchronous, asynchronous, or mixed. This analysis then informs a discussion about the ethics of travel for conferences, accessibility, sustainability, and the potential of virtual presentations for conferences that do not currently permit them.

53393
Innovation in Technical Education Instruction with Electrical Loads Monitoring and Control System Intervention
Leo Rio, University of Rizal System, Philippines
Marites Rio, University of Rizal System, Philippines

Integration of technology in the instructional process directs both the teachers and students to become successful with their goals of achieving desirable learning competencies. Through innovation in technical education instruction, educational institutions embraced the challenge of delivering a more engaging and meaningful instructional delivery with both the teacher and students showcasing deeper interest in knowledge and skill acquisition through actual and practical work exploration. This study introduced innovation in the design and development of an instructional intervention material in the form of an inexpensive monitoring and control system for electrical loads integrating the SMS, WiFi and Bluetooth wireless protocols utilizing low-cost materials. This initiative directed and inspired high levels of technical instruction which resulted to an effective learning condition among the Industrial Technology students of the University of Rizal System (URS), Province of Rizal, Philippines. The intervention material is designed to allow actual multiple electrical loads controlling and monitoring of the users/students and teachers. This lets them explore and understand how wireless protocols can be used to control and monitor electrical loads and utilize it as part of digital and analog electronic and electrical projects and activities. In this study, mixed method of research was employed as it integrates the elements of describing what was developed both qualitatively and quantitatively. Accuracy analysis of the control system was applied to determine its functionality and performance. With the finished output, graduates of Bachelor of Technology developed competence and the necessary skill and work requirements as prescribed by the local communities and partner-industries.

Virtual Presentations

53398

Dirty Battery, an Alternative Source of Electricity (DBASE) for the Community

Marites Rio, University of Rizal System, Philippines
Leo Rio, University of Rizal System, Philippines

Extension service is one of the functions of Higher Education Institutions in the Philippines. It is a service thrust of the University where community development projects and programs are served among the various sectors of community. With the University of Rizal System's commitment to empower community through relevant and sustainable technical instruction, research and extension services, a research in the development of a low-cost electrical energy generating system that can be utilized by the communities particularly from the remote areas became imperative. DBASE for the Community is a system that can produce direct current voltage, enough to be used to operate direct current loads. It was technically developed following the principle involved in electrical energy generation by chemical reaction. Though small in scale, its uniqueness lies on the way it produces electrical energy utilizing electrolytes being filtered out of kitchen wastes and low-cost electricity conducting materials. As the study disclosed in terms of electrical charge generation, DBASE can be used to supply electricity to DC loads in a ten-hour continuous operation. The study utilized the developmental and descriptive methods of research. Experimental method of research was also applied to lay down concrete data and scientific observations. Considering that technology transfer is inevitable as directed by the result of the study, community based training was organized for the community folks to teach them the procedure and technical aspect on how to construct and utilize DBASE. This lets them depend on their very own generating system to supply their simple home appliance.

53405

Understanding, Designing and Developing Assistive Technology for Students with Dyslexia in a Singapore Classroom

W. Quin Yow, Singapore University of Technology and Design, Singapore
YeeNing Tan, Singapore University of Technology and Design, Singapore
Tharshini Lokanathan, Singapore University of Technology and Design, Singapore

When developing assistive technology (AT) for individuals with learning or developmental difficulties, considering input from alternative stakeholders in the planning process increases the likelihood of sustainable AT programme implementation (Stoner, Parette, Watts, Wojcik & Fogal, 2008; Wong & Cohen, 2015). The study seeks to understand AT use in dyslexia intervention so as to effectively design and develop an innovative AT platform for primary school students with dyslexia. Focus group sessions were conducted at the Dyslexia Association of Singapore (DAS) with 9 Educational Therapists (EdTs) to discuss the challenges faced by dyslexic children, existing intervention methods, as well as their experiences, feedback and concerns with AT platforms. Observations of DAS students' (n=13, Males=9, age range=7-12-years-old) during their regular intervention sessions with the EdTs were carried out to understand the learning environment and the implementation of AT in dyslexia intervention from the users' perspectives. These students also tried out a prototype of a reading tool that we are developing, which facilitates word recognition and comprehension using the latest optical-character-recognition and text-to-speech technology. Qualitative thematic analyses of the data collected from the above sessions suggest that the current AT used in existing intervention is insufficient for addressing the specific reading and learning difficulties of the students, mainly due to a lack of resources, accessibility, and knowledge. Comparative analyses suggest that our innovative prototype is able to address these aforementioned limitations. The functional and logistical requirements expressed by the EdTs and students can serve as guidelines for future AT development and implementation.

53454

Developing Teachers' Computational Skills through a Systematic Professional Development Course in Malaysia

Mashitoh Hashim, Sultan Idris Education University, Malaysia
Hew Mee Cheah, Malaysian Digital Economy Cooperation (MDEC), Malaysia
Aslina Saad, Sultan Idris Education University, Malaysia
Mohd Hishamuddin Abdul Rahman, Sultan Idris Education University, Malaysia

In this paper, we describe a 3-day workshop as part of a school teacher professional development course in introducing teachers to computational thinking (CT) concepts in Malaysia. The workshop emphasizes problem solving that utilizes teachers' prior knowledge in their subject area, together with CT skills to help them understand the nature and scope of problem. A total of 54 school teachers, with the majority being non-computer science major graduates were involved in this workshop. Two survey questionnaires have been used, a pre training survey- to observe teachers' perceptions of their knowledge and skills and a post training survey – to view the teachers' perceptions of the training. The survey results showed that the teachers' perceived their knowledge and skills to be poor in the pre-training survey while they commented that the workshop was satisfying in the post-training survey. This study contributes to the teachers' professional development through the introducing of CT across many discipline subjects.

53499

Thriving Interdependence and Independence: Teamwork and Self-directed Learning as Nurtured by Team-Based Learning (TBL)?

Yuen Wah Li, Hong Kong Baptist University, Hong Kong

Team-based learning (TBL) is an instructional approach invented twenty years ago (Michaelsen, Knight & Fink, 2002) that "uses small groups extensively but sets up a particular sequence of activities that transforms groups into teams and then uses the extraordinary capabilities of teams to accomplish a high level of content and application learning" (Fink, 2003, p. 132). To better prepare my MBA students as an interdependent as well as an independent learner, I have initiated a pilot to introduce TBL in a core course (Client-based Research Methods). This came in response to management educators' call for enriching the instructional strategies to bolster relevance to managerial realities that demand teamwork and lifelong learning more than ever. The presentation is about the pilot taken in the past two years, featuring the outcomes in term of evidences for student learning, and the theoretical and empirical underpinning of TBL. Evidences for student learning will be presented, in terms of individuals' efficacy in teamwork (Eby & Dubbins, 1997) and self-direction in learning (Cheng, Kuo, Lin & Lee-Hsieh, 2010) measured at the beginning and near-the-end of the piloted classes, as well as the course performances of the cohorts before and after the piloted approach was in place. The evidences (and the lacking of it) for learning identified in the research will be discussed against the science and art of the strategy, along with the extant empirical evidences received in in the management and other professional educations.

Virtual Presentations

53651

Responsive MARCOM Display: A Case Study in Interdisciplinary Student Research

Mary Lynn Renton, College of the North Atlantic-Qatar, Qatar
Robert Ford, College of the North Atlantic-Qatar, Qatar
Joseph Yang, College of the North Atlantic-Qatar, Qatar
Salma Bayomi, College of the North Atlantic-Qatar, Qatar
Mohammad Basel Alnasan, College of the North Atlantic-Qatar, Qatar

Both marketing and information technology are rapidly evolving disciplines. The marketing industry relies heavily on technology to achieve its goal of communicating meaningfully with consumers. A collaboration between the Schools of Marketing and Information Technology at a TVET institution seems to be pragmatic, building on the synergies of the two disciplines three students, one alumni, two instructors and an entire host of supports converged to engage in a cross-disciplinary research project to explore student and staff reactions to facial recognition technology used for marketing purposes. This paper explores student and instructor experiences regarding their involvement in a project researching opinions and technology for the design and build of an on-campus facial recognition digital display for marketing purposes. The research methodology employed for the facial recognition marketing display project included Q-Methodology to obtain student and faculty opinions, design science methodology for the build and evaluation of the display and intercept interviews to gauge opinion after interacting with the developed display. The student and instructor reflections on this co-curricular student research project are intended to provide experiential insights into a case study of a co and post-curricular interdisciplinary student research project. The feedback indicates that the enriching experience for students far outweighs the obstacles and provides evidence that the incorporation of such opportunities is beneficial for students and instructors. This paper outlines some of the benefits and identifies some of the challenges when engaging in an interdisciplinary cross-collaboration.

53915

The Impact of Mobile Learning on Academic Achievement and Learning Experience Using a Tailor-made Mobile App

Hon Sun Chiu, The Hong Kong Polytechnic University, Hong Kong

With the rapid growth of mobile technologies, mobile learning becomes more and more popular where students can learn at any time and any place using their own mobile devices. A lot of researches have proven that mobile learning is feasible with various advantages such as diversifying learning activities and synchronizing learning experience. However, its impact on academic achievement is still controversy where contradictory conclusions were made in the literature. In this study, the effectiveness of mobile learning is further investigated. A technical subject was used because previous researches suggested that technical competence is one of the key success factors of mobile learning. According to the subject materials and teaching schedule, a tailor-made mobile app was developed to assist students' learning along with regular lecture and tutorial classes. By deploying the mobile app at different stages of teaching, a 4-year experiment was conducted where 3 cohorts of students were involved. Students' subject results were statistically analysed by one-way ANOVA with Turkey HSD post-hoc test. Mobile learning experience was also evaluated by survey using a 5-point Likert scale questionnaire. Analysis results showed that the use of mobile app has immediate effect on improving academic performance, but the effect becomes minimal when the mobile app is used for a longer period of time. Nevertheless, the questionnaire ratings demonstrated positive mobile learning experience, such as enhanced engagement and higher motivation of learning. These significant observations provide further information on how mobile learning could be effectively incorporated with pedagogical strategies.

53974

China's Path to World-Class Universities

Shangcao Yuan, University of Toronto, Canada

While efforts to build world-class universities have grown around the world in recent years, nowhere has this been more evident than in China. Recognizing the significance and popularity of the global research university that has been favoured by most western conceptualizations of world-class universities and has dominated major global university ranking systems, this paper situates the idea of world-class universities in the Chinese context and proposes an alternative model that is based on the unique Chinese scholarly tradition and has fundamentally different core values and epistemological patterns from the global research university. Critically reflecting on China's main policies on building world-class universities including the 211 and 985 projects and the most recent Double Top-Class plan, this paper argues that instead of blindly depending on the model of global research university that has deep roots in German and American experience, values institutional autonomy and academic freedom and privileges theoretical and specialized knowledge, China should follow the Chinese model that is deeply rooted in the Chinese Confucian culture and is characterized by self-mastery, intellectual freedom or intellectual authority, institutional diversity and preference of holistic and applied knowledge. However, emphasis on the Chinese model does not mean the exclusion of Western experience. The system of Chinese world-class universities should be open and diverse, continuing to learn from other models and trying to stimulate a dialogue among civilizations. This paper adds insights on interpretations of world-class universities and has some implications for Chinese policy makers on building world-class universities.

52027

Ethical Practices in Vocational Technical Education: A Sure Way to Sustainable Vocational Education in Nigeria

Chinedu Ochuba, Federal College of Education (T) Umunze, Anambra State, Nigeria
David Okoli, Federal College of Education (Technical) Umunze, Anambra State, Nigeria

Ethics defines good or bad. When applied to institutions, it allows groups to determine fair and appropriate procedures of doing things. Vocational and Technical Education (VTE) is the form of education which is obtainable at Technical Colleges and designed to prepare individuals to acquire technical or practical knowledge/vocational skills, basic and scientific knowledge necessary for production. Despite imparting knowledge, Vocational Education teachers also have it as their responsibility to make sure that students develop a sound character and acceptable societal moral values. Therefore, VTE teachers should be best described as role model to the students and the society at large. The findings revealed that consequences of relegating ethical practices in Vocational Technical Education have manifested in the quality of education delivery in form of; fallen standard in vocational education, relaxed discipline in schools, quasi implementation of school curriculum, increased examination malpractice and struggle to acquire certificate at all cost. All these are at expense of quality VTE. The paper recommends among others that efforts should be geared towards: development, publication and enforcement of clear regulations and minimum benchmarks for VTE programmes; designing and implementation of quality assurance and inspectorate duties to facilitate, encourage and help teachers to professionally perform their duties; prompt identification, isolation and sanctioning of teachers, regulators and inspectors involved in unethical practices etc.

54032
Enabling Independent Learning About Asia Through Student Engagement in a STEM Forum
Genevieve Hall, University of Melbourne, Australia

STEMing from Asia is the Asia Education Foundation (AEF)'s Science, Technology, Engineering and Maths (STEM) youth program for secondary school students in Australia, which enables teachers and students to deepen their STEM understanding in an intercultural context. Youth led, this engaging learning experience brings students from different schools together to explore examples of scientific and technological advances from across countries like China, Korea, Japan and Australia. This Forum provides the opportunity for students to connect their existing STEM knowledge with new knowledge in order to propose innovative solutions to pressing contemporary challenges in their own context. This paper will discuss how powerful and transformative learning can occur through activities such as this AEF forum, which occur outside of the formal classroom context. The forum enables students to develop their independent learning skills by having control over what and how they learn, in ways which cross subject curriculum boundaries and which involve real-world topics that are meaningful for them. Students also have an intrinsic motivation to learn because they have a stake in the outcome without the pressure of external assessment. The paper will also discuss how the teacher still plays an important role in this process, making it an interdependent learning experience. While the students in the AEF forums enjoy peer networking and having independence over what they learn, the guidance and resources provided by the teacher once they are back in the classroom gives students a focus and direction to enable transformative learning to take place.

54094
Supporting Teacher Education with Video-based Noticing: A Technological Innovation
Oi-Lam Ng, The Chinese University of Hong Kong, Hong Kong

In light of developments and emphasis in technology-enhanced teaching and learning in recent years, connected, yet often overlooked, is the need for teacher education training to equip teacher candidates with the necessary technological skills and pedagogical content knowledge for preparing technology-enhanced lessons. Without adequate training, it is difficult for pre-service teachers to plan effective lessons and to interpret students' actions and difficulties during the lessons due to their lack of classroom experience, especially when implementing technology-enhanced pedagogies. This paper discusses the design of technology innovation and its potential for supporting teacher noticing in teacher education programmes, especially in the context of technology integration. Specifically, it explores the use of an instant video-commenting feature built into an online course management system and the accompanying blended learning activities which aim to: (1) assist and improve pre-service teachers' noticing skills, (2) enhance video engagement in blended classroom teaching and learning, and (3) facilitate in-class discussions of pre-service teachers' noticing of classroom episodes in which technology was integrated into the lessons. It was found that pre-service teachers demonstrated solid noticing skills and high fluency in describing subtleties of the classroom episodes. It is concluded that the designed blended learning activities with reflective video-based teacher education course materials address pre-service teachers' technological and pedagogical content knowledge in underpinning successful integration of technology in mathematics classrooms. Other findings from a pilot implementation, affordances of the innovation in relation to providing individualized noticing and formative assessment, and potential research direction in teacher education will be discussed.

54362
How to Create Educational Children's TV Programs: A Strategic Practice for Survival in the Digital Age
Pataraporn Sangkapreecha, Bangkok University, Thailand

Since the past to the present, the television is one type of mass communication that plays a significant role in influencing people in many areas. However, in the era of digital age, it is challenging for the Educational TV channels to create the programs that gain interest from the current individual audience. This documentary research aims to give insights into the situation of current educational TV programs in Thailand and attentively proposes the strategic practices for the channels to survive in this digital age. The educational channels cannot only rely on the content of pure knowledge anymore. They must also specify the target group of the channel, use an idol and create contents and activities that serve the needs and interests of the generation Z. Significantly, the programs must be broadcasted on various media channels, especially online social network and working together with the government, community and private sectors to achieve more than anyone sector could achieve on its own.

54583
Reflection on the Curricular Reform with an Emphasis on Preschool Education in the Czech Republic
Eva Šmelová, Palacky University Olomouc, Czech Republic

Since 1990, preschool education in the Czech Republic has undergone significant qualitative changes. The main focus has been on personality-oriented education of the child. In accordance with this concept, a two-tier preschool curriculum was established in 2001 including the school and the state level. After a period of verification, the curriculum was enacted in 2007. Teachers began to design the curriculum of their own school, reflecting its conditions and respecting an individualized approach to education. The curricular reform represents an important process, which is the focus of the present qualitative survey. The objective of the research was to use a holistic approach to identify the constitutive elements of the curricular reform in the context of everyday life in kindergartens, but with a deeper understanding. The aim of the study is to answer the following questions: Is the implementation of the preschool curriculum in accordance with the objectives of the curricular reform? What are the causes of the drawbacks identified? What are the prospects of the implementation of the curriculum? The basic research method was a document analysis involving research results, reports of the Czech School Inspectorate, and analyses of school educational programmes. The method of document analysis was supplemented with a semi-structured interview with kindergarten teachers and university professionals involved in the education of future teachers. Using a suspenseful procedure the authors present important knowledge relating to the curricular reform in the context of preschool education. The paper describes the effect of crucial conditions on the implementation of the reform.

Virtual Presentations

54246

Authentic Learning in Dynamic Globalization Context: Experiential Learning Through Students Business Projects
Kant Thongtawee, Valaya Alongkorn Rajabhat University, Thailand

This study aims to explore the experiential learning of students in a business management class at bachelor degree level, for better coping and understanding of students in real business world within the dynamic globalization context of their generation. The qualitative method of study was used for data collecting and analysis: participant observation and in-depth interview. It is found in this study that students could continue to study and develop their business ideas after being challenged to design and implement their own business projects in class. The experiential learning is thus a good initiative to life long learning of students in business management field. Students have become more perceptive and adaptive to the dynamic of globalization surrounding.

54694

Bifactorial Analysis of the Performance of University Students in a Constructivist Learning Environment Using Inferential Statistics
Mario Chauca, Universidad Nacional del Callao, Peru
Baldo Olivares, Universidad Nacional del Callao, Peru
Ana Leon, Universidad Nacional del Callao, Peru

The goal of this research of experimental level and applied type of research work is to demonstrate that the design of constructivist learning environments raises the level of the qualifications of university students, focuses on presenting a two-factor analysis developed in the environments of the Faculty of Fisheries and Food Engineering of the National University of Callao. The information is presented tabulated and arranged in statistical tables and graphs that allow the analysis based on inferential statistics for the seven double hypothesis tests in the statistical design process for data processing. In the processing of the analysis of the information collected during the investigation, it is proved by our results are statistically significant since more than 95% of the university students who received the treatment, improved their qualifications and the obtained data support this affirmation.

53041

Employing the Ethnographic Approach "Funds of Knowledge" to Explore English Learning of Taiwanese Indigenous Youngsters
Sa-hui Fan, National Taichung University of Education, Taiwan
Chiu-ping Chao, National Taichung University of Education, Taiwan

The importance of learning English has been increased in Asia due to the huge impacts brought continuedly by globalization. Taiwan is a multicultural society but few research has been conducted by adopting the multicultural approach "funds of knowledge" to facilitate the indigenous students' English learning in Taiwan. The main purpose of this study was to explore the familial funds of knowledge of 3 urban indigenous youngsters in central Taiwan, as well as the hindrance of applying that on English learning. Furthermore, effective English teaching methods are suggested based on the emerged findings. This study adopted an ethnographic mode. The participants were 3 six-graders whose parents descend from the Taiwanese indigenous tribal people but moved from the remote shores to the urban areas. Their families, community and two English teachers were also interviewed. This urban indigenous community in central Taiwan has been formed for more than 30 years. The fieldwork had lasted 4 months. The main findings of this study include: 1. Familial funds of knowledge of the participants includes indigenous and non-indigenous knowledge. Indigenous knowledge of this study are especially referred to their tribal cultures: Pangcah and Paiwan. 2. The hindrance of applying their familial funds of knowledge on English learning includes the limited usages of English and indigenous languages, the limited hours of English classes, teachers' lack of expectations and cultural sensitivity, textbook-framed teaching methods, and weak connections between families, the community and the school. 3. The suggested English teaching methods include employing cross-disciplinary and project-based teaching methods.

54592

Disciplinary Training and Professional Practices Effects on Soft Skills Development
Irina Granados, UNIMINUTO, Colombia
Andrea Romero, UNIMINUTO, Colombia
Glenny González, UNIMINUTO, Colombia
Sandra Lopez, UNIMINUTO, Colombia

At present, the development of soft skills or transversal skills has become a relevant issue for higher education institutions. The purpose of this research is to evaluate the discipline training and professional practices effect on the soft skills development of the UNIMINUTO Vicerectoria Regional Sur (VRBS) students. This research will be developed under a pragmatic paradigm and a mixed model design characterized by making a parallel evaluation based on an exploratory investigation that generates quantitative and qualitative data and analysis. The participants will be 163 undergraduate students of UNIMINUTO Vicerectoria Regional Sur (VRBS) of the programs: social work, social communication, and psychology, the students will be chosen by sampling for convenience. Finally, it is important to point out that the results obtained will allow us to consider whether pedagogical adjustments are necessary into the curricular component and the professional practices to train professionals with the capacity to do and the skills necessary to be. It is hoped that with the present research, the student community of the Minuto de Dios University Corporation will be benefited through the identification of priority needs for training in personal skills that can have an important impact on the work area and professional development to strengthen the profile of UNIMINUTO graduates. Finally, it is important to point out that the results obtained will allow us to consider whether pedagogical adjustments are necessary both to the curricular component and to the professional practices.

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