

ACE 2019

Toshi Center Hotel, Tokyo, Japan
October 31 - November 3, 2019

Final Draft Schedule

Please Check & Confirm

Please check that all information pertaining to you is correct and notify us at support@iafor.org if there is any error.

Please notify us of any corrections by **Sunday, October 6** 09:00 (Japan Time).

Final Schedule

After minor changes have been made to the schedule we will send you a link to the final schedule.

The final schedule will contain session information and a detailed day-to-day presentation schedule (including room allocations and session chairs).

This will be available on **Tuesday, October 22.**

All Abstracts will also be available online at this time.

Sunday at a Glance

November 3, 2019

Toshi Center Hotel – Conference Center (6F & 7F)

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

Sunday Session I: 09:00-10:40

Room: *To be Announced in Final Schedule*

Session Topic: Learning Experiences: Games

Session Chair: *To be Announced in Final Schedule*

53359

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.

52304

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

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: 09:00-10:40

Room: *To be Announced in Final Schedule*

Session Topic: Issues in Rural Education

Session Chair: *To be Announced in Final Schedule*

54883

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 and local government reports 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

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

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.

Sunday Session I: 09:00-10:40

Room: *To be Announced in Final Schedule*

Session Topic: Professional Development for Teachers

Session Chair: *To be Announced in Final Schedule*

53400

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

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**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**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.

Sunday Session I: 09:00-10:40Room: *To be Announced in Final Schedule*

Session Topic: Workplace Education

Session Chair: *To be Announced in Final Schedule***53328****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**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

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

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.

Sunday Session I: 09:00-10:40Room: *To be Announced in Final Schedule*

Session Topic: Visual Learning

Session Chair: *To be Announced in Final Schedule***54226****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**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**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

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: 09:00-10:40

Room: *To be Announced in Final Schedule*

Session Topic: International Education: Students

Session Chair: *To be Announced in Final Schedule*

52454

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

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

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

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.

Sunday Session I: 09:00-10:40

Room: *To be Announced in Final Schedule*

Session Topic: Technology in Education

Session Chair: *To be Announced in Final Schedule*

53870

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.

52758

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**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**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.

Sunday Session I: 09:00-10:40

Room: *To be Announced in Final Schedule*

Session Topic: Teaching Students with ASD

Session Chair: *To be Announced in Final Schedule*

54531

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

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 Studiyanito, Universitas Sebelas Maret, Indonesia

Satoshi Muraki, Kyushu University, Japan

ABA (Applied behavior analysis) therapy, introduced by Ivar Iovaas, 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**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.

Sunday Session I: 09:00-10:40

Room: *To be Announced in Final Schedule*

Session Topic: Learning Experiences: Math Education in Adolescents

Session Chair: *To be Announced in Final Schedule*

53792

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

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

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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Technologies in Education

Session Chair: *To be Announced in Final Schedule*

54306

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

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

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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Teaching and Learning: Observing the Class

Session Chair: *To be Announced in Final Schedule*

54130

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

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

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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Language Learning: Methodology

Session Chair: *To be Announced in Final Schedule*

52356

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

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.

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 continually 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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Education & Employment

Session Chair: *To be Announced in Final Schedule*

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.

52028

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.

52897**Do Business Management Graduates Possess the Competencies Needed in Their Job?: A Tracer Study**

Yonardo Gabuyo, 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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Independence & Interdependence of Students

Session Chair: *To be Announced in Final Schedule*

53354

Developing Educational Approaches that Foster the Creativity and Sociality of University Students

Akinori Yamabe, Jichi Medical University, Japan

In today's information driven society, education fostering the ability of university students to think critically is now essential. For example, people are becoming more susceptible to accepting false or misleading information, such as accepting 'fake news' as truth. Therefore, perspectives that reflect upon and respond to the demands of society have become critical components allowing students to successfully navigate complex societies. The development of such skills is conducive to pedagogical approaches that foster active learning where students actively think about the concepts and knowledge presented. Active learning has been emphasized in higher education in Japan, and is promoted by various universities throughout the country, however, many traditional methods such as group work and presentations are heavily relied upon. There is a lack of innovative active learning approaches that attract students' intellectual interests while meeting educational goals and objectives. Because of this, it is necessary to implement various educational challenges and evaluations.. Therefore, we constructed a class called "media and society" intended for first year students who will become doctors in the future. After a few lectures conducted by a TV producer who introduces a significant variety of programs, students were asked to think about what kinds of program themes are applicable to meeting societal needs, and how to effectively communicate them. Results indicate that creative learning can produce opportunities for students to actively reflect upon society. In this study, we analyze and consider this approach's impact on learning.

53385

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.

53486**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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Student Performance

Session Chair: *To be Announced in Final Schedule*

53863

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.

52852

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**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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Technology in Education: Math

Session Chair: *To be Announced in Final Schedule*

52995

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

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**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: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: At-risk & Special Needs Education

Session Chair: *To be Announced in Final Schedule*

53429

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

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**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.

Sunday Session II: 11:00-12:15

Room: *To be Announced in Final Schedule*

Session Topic: Politics in Education

Session Chair: *To be Announced in Final Schedule*

54783

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

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

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.

Sunday Session III: 13:15-14:30

Room: *To be Announced in Final Schedule*

Session Topic: Education & Employment

Session Chair: *To be Announced in Final Schedule*

52180

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

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**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

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.

Sunday Session III: 13:15-14:30

Room: *To be Announced in Final Schedule*

Session Topic: Higher Education: Curriculum Design

Session Chair: *To be Announced in Final Schedule*

54006

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

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

**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".

Sunday Session III: 13:15-14:30

Room: *To be Announced in Final Schedule*

Session Topic: Teaching Experiences: Student Roles

Session Chair: *To be Announced in Final Schedule*

53503

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

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

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: 13:15-14:30

Room: *To be Announced in Final Schedule*

Session Topic: International Education: Teaching Abroad & Migrant Teachers

Session Chair: *To be Announced in Final Schedule*

53107

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

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

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.

Sunday Session III: 13:15-14:30

Room: *To be Announced in Final Schedule*

Session Topic: Learning Experiences: Student Perceptions

Session Chair: *To be Announced in Final Schedule*

52856

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

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

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.

Sunday Session III: 13:15-14:30

Room: *To be Announced in Final Schedule*

Session Topic: Online Education

Session Chair: *To be Announced in Final Schedule*

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

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

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

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-paced 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: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Pedagogy of Art & Design

Session Chair: *To be Announced in Final Schedule*

52090

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

Contemporary and Conventional Pedagogical Approaches in the Teaching of Computer-Aided Design and Drafting for Architecture

Jennis Articon, Rizal Technological University, Philippines

This study was anchored from the Connectivism Theory of Siemens (2005) and the Activity Theory of Engeström (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**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).

Sunday Session IV: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Teaching Strategies

Session Chair: *To be Announced in Final Schedule*

52450

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

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

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.

Sunday Session IV: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Language Learning: Tools for Learners

Session Chair: *To be Announced in Final Schedule*

54565

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

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**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 on the extent to which learners can use these words and phrases. 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 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%.

54538**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.

Sunday Session IV: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Learning Experiences: Student Character & Leadership

Session Chair: *To be Announced in Final Schedule*

51228

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

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**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**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.

Sunday Session IV: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Assessment

Session Chair: *To be Announced in Final Schedule*

53053

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

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

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

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.

Sunday Session IV: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Teaching Experiences: Leadership for Diversity & Inclusion

Session Chair: *To be Announced in Final Schedule*

53952

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

Providing Broadened Educational Opportunities for Students Through Effective School-Based Management Practices

Jhon Hayden Bale, University of the Philippines Diliman, 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**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**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: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Teacher Training

Session Chair: *To be Announced in Final Schedule*

53404

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.

54488

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 ($\text{Chi-Square}(4) = 1.82, p=0.77$). 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**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**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.

Sunday Session IV: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Language Learning: Computer Assisted

Session Chair: *To be Announced in Final Schedule*

52608

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

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**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.

Sunday Session IV: 14:45-16:25

Room: *To be Announced in Final Schedule*

Session Topic: Language Learning: Japanese as a Second Language

Session Chair: *To be Announced in Final Schedule*

54532

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

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

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.

Virtual Presentations

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.

52869**Examining the Math Activity Participation of Parents With Their Young Children: The Development of the MAPP-RESET Model**

Anastasia Betts, University at Buffalo - SUNY, United States

Research has shown that parent-child engagement in math activities has a significant positive impact on children's mathematics achievement, and that the more parents interact with their children through mathematics, the more likely children are to experience higher math achievement. Yet, studies also show that parents' mathematics engagement with their young children is largely limited or altogether non-existent. As evidence mounts supporting the importance of kindergarten math-readiness and its role in the future success of students, it is more critical than ever that researchers take an active role in examining the ways in which the home numeracy environment shapes a child's math knowledge in the early years, especially for children from under-resourced communities who are most at risk for school failure. The present study introduces the MAPP-RESET model, a way to examine the Math Activity Participation of Parents (MAPP) with their children through the factors that influence that participation (RESET: Role, Efficacy, Skills, Expectations, Time). This study further establishes the use of a survey instrument based on the MAPP-RESET model, to both measure parent characteristics and identify relationships between parent characteristics (RESET) and parent math activity participation (MAPP). The results of this study provide researchers with new tools and methods to study the role of parents in the Home Numeracy Environment, and provides stakeholders with information needed to create better parent-engagement programs that can increase parent-child math activity, which may lead to higher math achievement for children - especially children in underserved communities who are most in need of support.

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

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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.

53398

Dirty Battery, an Alternative Source of Electricity (DBASE) for the Community

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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

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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**

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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)?**

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Team-based learning (TBL) is an instructional approach invented twenty years ago (Michaelson, 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.

53651**Responsive MARCOM Display: A Case Study in Interdisciplinary Student Research**

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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

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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

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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.

54032

Enabling Independent Learning About Asia Through Student Engagement in a STEM Forum

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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.

54246

Authentic Learning in Dynamic Globalization Context: Experiential Learning Through Students Business Projects

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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.

54362

How to Create Educational Children's TV Programs: A Strategic Practice for Survival in the Digital Age

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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

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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.

54694

Bifactorial Analysis of the Performance of University Students in a Constructivist Learning Environment Using Inferential Statistics

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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.