

CPCECPR Conference 2023

Smart Education: Pedagogical Innovation and Learning Analytics

- Learning Analytics
- Educational Technologies and Innovation
- Technology-enhanced Professional Development

Date: 16 January 2023 (Monday)

Time: 9:00 am – 6:30 pm (GMT +8)

Venue: UG06, PolyU Hung Hom Bay Campus (Hybrid via Zoom)

Medium: English



Conference Website

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I. Introduction

About CPCE Centre for Pedagogic Research (CPCECPR)

With a strong commitment to informing and nurturing excellent teachers, curriculum developers and programme leaders at the higher education level in Hong Kong, CPCECPR, established in March 2021, aspires to enhance the scholarship of teaching and learning and pedagogic research in the higher education sector:

1. To enhance the institution's experience, ability, and status in performing research work related to teaching excellence, learning, assessment, curriculum design, and educational leadership.
2. To acquire funding to support research activities, especially in improving the education quality, pedagogical models and methodologies within and across the disciplines, and in promoting equity in education.
3. To provide professional services, including workshops, webinars, seminars, and training programmes, to the education and community sectors, with a view to initiating and sustaining dialogue about teaching excellence.
4. To contribute new knowledge and insights to the academic and education sectors by sharing research findings via conferences, journals, and books.
5. To underpin teaching with knowledge created from the Centre's research and development works and activities.

About the Conference

PolyU CPCE strives to offer quality tertiary education to students and facilitate staff members' active engagement in scholarly activities which underpins teaching and learning excellence. Established in March 2021 as part of PolyU CPCE, CPCECPR promotes the scholarship of teaching and learning and pedagogic research in the field of higher education. This conference will offer researchers and educators an exciting opportunity to engage in discussions on topics related to enhancing teaching and learning experience with innovative pedagogies and pedagogic research, leveraging digital technologies, big data and analytics. Entitled "Smart Education: Pedagogical Innovation and Learning Analytics", the Conference encompasses the following three themes: (1) Learning Analytics; (2) Educational Technologies and Innovation; and (3) Technology-enhanced Professional Development.

II. Organisation of Conference

Hosts

Prof. Peter P. YUEN

Dean, PolyU CPCE;
Professor, Department of Management and Marketing, PolyU

Prof. LEUNG, Chun-wah

Associate Dean (Research), PolyU CPCE
Interim Director, PolyU SPEED

Dr TONG, Ka-man Esther

Division Head, Division of Languages and Communication, PolyU CPCE;
Director, CPCECPR

Conference Organiser

CPCECPR

Co-host

PolyU Educational Development Centre



Director: Dr Julia CHEN, PolyU Associate Professor (Courtesy), Department of English and Communication, PolyU

Organising Committee

Conference Chair

Dr LAI, Wience Wing-sze

Senior Lecturer and Associate Head, Division of Languages and Communication, PolyU CPCE;
Deputy Director, CPCECPR

Committee Members

Dr CHEUNG, Eric Lok-ming

Lecturer, Division of Languages and Communication, PolyU CPCE;
Member, CPCECPR

Dr KWOK, Frieda Yuk-yin

Senior Lecturer, Division of Languages and Communication, PolyU CPCE;
Member, CPCECPR

Dr LAU, Joseph Yui-yip

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE;
Associate Member, CPCECPR

Dr LAU, Mei-meい May

Lecturer, Division of Business and Hospitality Management, PolyU CPCE;
Member, CPCECPR

Dr LAW, Vincent Tin-sing

Senior Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE;
Associate Member, CPCECPR

Dr LO, On-ting

Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE;
Member, CPCECPR

Dr SUN, Vera Nim-yan

Senior Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE;
Member, CPCECPR

Dr TONG, Ka-man Esther

Division Head, Division of Languages and Communication, PolyU CPCE;
Director, CPCECPR

Dr WONG, Ka-lok Adam

Senior Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE;
Deputy Director, CPCECPR;
Project Coordinator, QESS Blended Learning Project

Dr WONG, Macy Mei-chi

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE;
Sub-Committee Member, CPCECPR

Dr YEH, Wai-man Helen

Lecturer, Division of Languages and Communication, PolyU CPCE;
Associate Member, CPCECPR

Administrative Support

Miss Catherine CHAN

Project Associate, PolyU SPEED;
Assistant Secretary, CPCECPR

Miss Jennifer LAU

Programme Officer, Division of Languages and Communication, PolyU CPCE;
Secretary, CPCECPR

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III. Programme Schedule

Time	Agenda	Speaker
8:45 am	Registration	
9:00 am	Welcoming remarks	Prof. Peter P. YUEN Professor and Dean, PolyU CPCE
9:10 am	Welcome speech	Dr Julia CHEN Director of Educational Development, PolyU Associate Professor (Courtesy), Department of English and Communication, PolyU
9:20 am	Keynote address	Mr SZE Chun Fai, Jeff, JP Under Secretary for Education Education Bureau, HKSAR Government
9:30 am	Photo-taking and souvenir presentation	
Keynote Session 1		
9:40 am	Transforming pedagogical practice with learning analytics	Prof. Dragan GASEVIC Distinguished Professor of Learning Analytics Director, Centre for Learning Analytics Monash, Monash University
10:30 am	Morning break	
Plenary Session 1: Learning Analytics (Co-hosted by PolyU EDC)		
10:40 am	Supporting institutional adoption of learning analytics in higher education	Prof. Abelardo PARDO Professor and Dean of Programs (Engineering) at UniSA STEM University of South Australia, Australia
11:05 am	Supporting teachers to utilise learning analytics in their teaching	Mr Dick CHAN and Ms Ada TSE Educational Development Officers, Educational Development Centre, PolyU
11:30 am	Applying learning analytics to evaluate learner autonomy and blended learning in accounting education	Dr Bruce LI Teaching Fellow, School of Accounting and Finance, Faculty of Business, PolyU
11:55 am	Tracking at-risk student groups from teaching and learning activities in engineering education	Ir KWAN Chung-lim Senior Teaching Fellow, Department of Civil and Environmental Engineering, Faculty of Construction and Environment, PolyU

12:20 pm	Panel discussion	Moderators Mr Dick CHAN & Ms Ada TSE Educational Development Centre, PolyU
12:35 pm	Luncheon	Booths in the foyer area on UG/F HHB: <ul style="list-style-type: none"> • AR/VR booth sponsored by Mr Lucas LEUNG, TraVR HK Limited (www.travrhk.com) • Metaverse booth sponsored by Dr Daniel SHEN, Soqgle (https://soqgle.com/)* <p>* Available 9:00 am – 6:30 pm</p>
1:55 pm	Photo-taking and souvenir presentation	

Keynote Session 2

2:05 pm	Can virtual learning communities build identity for isolated instructors?	Prof. Milton D. COX Founder and Editor-in-Chief Emeritus, Journal on Excellence in College Teaching, Miami University
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Plenary Session 2: Educational Technologies and Innovation

2:55 pm	Mapping innovative learning with immersive VR/AR technologies	Dr CHAN, Kai-yue Jason, MH, JP Associate Dean (Information and Development) and Head of IT, PolyU CPCE
3:20 pm	Experiential learning in virtual business simulation	Mr Michael CHAN Founder of Icetech Hong Kong Co. Ltd. and International Association of Business Management Simulation
3:45 pm	When educators meet the metaverse: An overview and challenges	Dr Lik-hang LEE Assistant Professor, Department of Industrial and Systems Engineering, Korea Advanced Institute of Science and Technology
4:10 pm	Does learner generated video matter? Student engagement and learning effectiveness in learning computer software	Dr WUT, Tai-ming Edmund Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE
		Dr WONG, Ka-lok Adam Senior Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE

4:35 pm Panel discussion

Moderators

Dr NG, Mei-lan Peggy & Dr WONG, Wai-sum Phoebe
PolyU CPCE

4:50 pm Afternoon break

Plenary Session 3: Technology-enhanced Professional Development

5:00 pm How did English teachers develop
their corpus-based language
pedagogy: a case study

Dr MA Qing
Associate Professor, Department of
Linguistics and Modern Language Studies (LML),
The Education University of Hong Kong

5:25 pm Providing research experience to
undergraduate students in the
latest technological environment
for professional development

Dr LAM, Wai-ming Edmond
Senior Lecturer, Division of Science, Engineering and
Health Studies, PolyU CPCE

Dr Anand VYAS
Lecturer, Division of Science, Engineering and
Health Studies, PolyU CPCE

5:50 pm Panel discussion

Moderators

Dr WONG, Ka Lok Adam & Dr LO, On-ting
PolyU CPCE

6:05 pm Closing remarks

Prof. LEUNG, Chun-wah
Associate Dean (Research) , PolyU CPCE
Interim Director, PolyU SPEED

6:15 pm Lucky draw and photo-taking session

Feedback



IV. Programme

Welcoming Remarks



Prof. Peter P. YUEN

**Dean, PolyU CPCE
Professor, Department of Management and Marketing, PolyU**

Prof. Yuen's research mainly focuses on public policy formulation and evaluation, and health services management. He is the Co-Editor-in-Chief of Public Administration and Policy and an Editorial Committee member of Asia Pacific Journal of Health Management. Prof. Yuen has served as a member of the HKSAR Government Manpower Development Committee, Health and Medical Development Advisory Committee, and the Committee on Self-financing Post-secondary Education. He is a founding Fellow of the Hong Kong College of Health Services Executives, and an Honorary Fellow of the Australian College of Health Services Management. He is also the immediate Past Chairman of the Federation for Self-financing Tertiary Education (Hong Kong).

Welcome Speech



Dr Julia CHEN

**Director of Educational Development, PolyU
Associate Professor (Courtesy), Department of English and Communication, PolyU**

Julia Chen, PhD FTCL PFHEA, is the Director of the Educational Development Centre at The Hong Kong Polytechnic University. She and her inter-institutional English Across the Curriculum EAC team recently received the Hong Kong University Grants Committee Teaching Award in the Collaborative Team category and the QS Reimagine Breakthrough Technology Innovation in Education Award, Silver prize. Her research interests include leveraging technology for advancing learning, English Across the Curriculum, and using learning analytics for quality assurance and enhancement.

Keynote Address



Mr SZE Chun Fai, Jeff, JP

**Under Secretary for Education, Education Bureau,
Hong Kong SAR Government**

Mr Jeff Sze is currently the Under Secretary for Education of the Government of the Hong Kong Special Administrative Region of the People's Republic of China. He was the Political Assistant to the Secretary for Education from November 2012 to June 2022. Prior to joining the Government, Mr Sze served as a school teacher at HKUGA College. He was also the Executive Director of Savantas Policy Institute, and a part-time member of Central Policy Unit. Mr Sze holds a Bachelor of Science degree in Mathematics and a Master of Science degree in Statistics from Stanford University. He also holds a Postgraduate Diploma in Education, majoring in Economics, from the University of Hong Kong.

Closing Remarks



Prof. LEUNG, Chun-wah

**Professor and Associate Dean [Research], PolyU CPCE
Interim Director, PolyU SPEED
Advisor, CPCECPR**

After serving the Department of Mechanical Engineering of the Hong Kong Polytechnic University as Professor from 1999 to 2018, Prof. Leung joined PolyU CPCE in 2018. He has been granted 12 times by the Research Grant Council. With findings emerging from the research work, he has published 155 journal papers. Also, Prof. Leung has successfully supervised 19 PhD, 4 EngD and 11 MPhil graduates. Prof. Leung was ranked among the world's top 2% scientists by Stanford University in the list published in Elsevier BV, a leading publisher of academic journals, in 2021.

V. Keynote Sessions

Keynote Session 1

Keynote Speaker



Prof. Dragan GASEVIC

**Distinguished Professor of Learning Analytics
Director, Centre for Learning Analytics at Monash, Monash University**

Prof. Dragan Gasevic is Distinguished Professor of Learning Analytics in the Faculty of Information Technology and Director of the Centre for Learning Analytics Monash at Monash University. His research interests center around the development of computational methods that can advance understanding of self-regulated and collaborative learning.

Topic

Transforming pedagogical practice with learning analytics

Abstract

Learning analytics was established as a field that seems harness the power of data to address some of the key challenges in education. Existing research and practice offer some promising accounts demonstrating the benefits of learning analytics for education in areas such as predication of student success, measurement of 21st century schools, and personalized feedback at scale. However, using learning analytics to inform pedagogical innovation still remains an open challenge. This talk aims to present directions for using learning analytics in pedagogical innovation based on existing evidence documented in research and practice. The talk will first highlight the need to incorporate considerations about data collection together with early stages of learning design. The talk will then discuss the extent to which pedagogical innovation and data analysis are intertwined in order to produce meaningful and actional insights. Finally, the talk will discuss some state-of-the-art approaches such as data storytelling and automated feedback that can be used to transform learning and teaching practice.

Keynote Session 2

Keynote Speaker



Prof. Milton D. COX

**Founder and Editor-in-Chief Emeritus,
Journal on Excellence in College Teaching, Miami University**

Prof. Milton D. Cox received his PhD in Mathematics followed by leadership in areas of academic development. He is founder, director emeritus, and editor-in-chief emeritus of conferences, journals, and teaching and learning centers. He has published articles and invited chapters while serving as on-site visiting consultant at over 125 institutions in higher education.

Topic

Can virtual learning communities build identity for isolated instructors?

Abstract

This presentation poses a research question involving academic professional development in higher education: With respect to building the professional identity of isolated instructors, can virtual communities of practice (VCoPs) produce outcomes similar to those produced by face-to-face faculty learning communities (FLCs)? Face-to-face FLCs have been shown to build the professional identity of early-career faculty (staff), senior instructors, part time and adjunct instructors (sessionals), and instructors who form a cohort with a common teaching and learning interest such as developing the scholarship of teaching and learning. However, the engagement of face-to-face learning communities has been restricted by the pandemic. Also, some isolated instructor cohorts will never have the opportunity of face-to-face meetings, for example, instructors across distant campuses, perhaps distributed internationally. A recent research result describes a VCoP of participants outside of academia whose members are new to their profession successfully developed their professional identities. This VCoP involved an employer, professional body, and workplace that addressed the need to provide a supportive workplace for practitioners who worked offsite and in isolation. In this presentation we will investigate the structure and process of this VCoP and the feasibility of generalizing its structure, process, and outcome to isolated instructors in higher education.

VI. Plenary Sessions

Plenary Session 1: Learning Analytics (Co-hosted by PolyU, EDC)



Prof. Abelardo PARDO

**Professor and Dean of Programs (Engineering) at UniSA STEM
University of South Australia, Australia**

Prof. Abelardo Pardo is Professor and Dean of Programs (Information Technology & Mathematics), UniSA STEM at the University of South Australia. His research interests include the design and deployment of technology to increase the understanding and improve digital learning experiences. More specifically, his work examines the areas of learning analytics, personalized active learning, and technology for student support.

Topic

Supporting institutional adoption of learning analytics in higher education

Abstract

The presence of data collected through technology mediation in learning experience is now ubiquitous. Researchers have shown the potential of this data to enhance the support for instructors and institutions to increase the quality of the overall student experience. However, the deployment of this support at the institutional level is encountering significant barriers. This talk will discuss these barriers and provide insights about the structures and approaches that facilitate the adoption of analytics at the institutional level.

Plenary Session 1: Learning Analytics (Co-hosted by PolyU, EDC)



Mr Dick CHAN

Educational Development Officer, Educational Development Centre, PolyU

Mr Dick Chan is the Education Development Officer (Senior Learning Technologist) working in the Educational Development Centre at PolyU. He has been working in the LA and eLearning areas for over 10 years. He has developed several LA tools and has presented these tools at international conferences.



Ms Ada TSE

Educational Development Officer, Educational Development Centre, PolyU

Ms Ada Tse is currently working for the Educational Development Centre at PolyU as an Educational Development Officer (Senior Analytics and Evaluation Specialist). She has over 14 years' experience in conducting large-scale surveys and assessments and has been involved in many analytics projects about using data for enhancing learning and teaching and students' learning experience.

Topic

Supporting teachers to utilise learning analytics in their teaching

Abstract

After a long period of focusing on online learning and teaching (L&T) during the pandemic days, most of the institutions are now bringing back the face-to-face L&T to the curriculum. Nonetheless, online L&T will continue to be adopted and implemented across institutions and become a new normal in higher educational teaching. Instructors and learning designers need to understand student online learning behaviours. This can be done by analysing the large amount of usage logs generated from the online L&T platforms. The learning analytics (LA) team of the Educational Development Centre at the Hong Kong Polytechnic University has designed and developed a novel reporting system for the University which can reflect students' engagement to the online learning resources provided in the LMS and various online L&T platforms. Moreover, specific LA tools have been developed for teachers. For example, an Excel tool which can generate statistics of the online chatroom activities from the online conferencing platforms. In this presentation, the team is going to share the experience of utilising LA to support L&T in the University.

Plenary Session 1: Learning Analytics (Co-hosted by PolyU, EDC)



Dr Bruce Li

**Teaching Fellow, School of Accounting and Finance,
Faculty of Business, PolyU**

Dr Bruce Li, from School of Accounting and Finance (AF) of PolyU, is a teacher with inspiration, innovation and mission in learning and teaching. He is keen to stay abreast of new knowledge, theories, developments and research in his own fields in order to transmit them to his students. He derives great joy from seeing his students grow and learn.

Topic

Applying learning analytics to evaluate learner autonomy and blended learning in accounting education

Abstract

Traditional Learning uses summative assessments and limits the efficiency and effectiveness of learning, teaching and assessment. Blended Learning provides different learning experiences to students by mixing face-to-face learning and teaching as well as different online formative assessments, such as, individual assignments, group discussion forums, self and peer assessments, reflective essays, etc.

While blended learning has been introduced to mitigate the issues of traditional teaching, there are no one-size-fits-all model and optimal mix for benchmarking. The pandemic has prompted the need for a more sustainable yet effective teaching model under rapid changes and various challenges.

This presentation introduces an innovative and sustainable green blended learning model for pedagogy development. Leveraging language learning, we aim to create students' learner autonomy to foster learning to learn, critical thinking, and collaborative learning. Through learner autonomy, students take control and responsibility for their learning. Modern technology also makes it possible for students to learn at their own time, pace and schedule. Relying on the learning analytics from online teaching and learning platforms, teachers can continuously guide and monitor students' learning journey in a less intrusive way. The 100% online teaching and learning activities are not only environmentally friendly but also feasible under any teaching mode.

Plenary Session 1: Learning Analytics (Co-hosted by PolyU, EDC)



Ir Kwan Chung-lim

**Senior Teaching Fellow, Department of Civil and Environmental Engineering,
Faculty of Construction and Environment, PolyU**

Ir Christopher CL Kwan currently assumes responsibilities as a programme leader of BEng(Hons) in Civil Engineering (Senior Year curriculum) at PolyU. He has been teaching diverse structural engineering subjects and has developed a KEEP Open edX course to support blended learning and supplement face-to-face lecturing in large classes. He was the recipient of the CEE departmental teaching excellence award in 2019 and the 2nd prize of the Community of Practice on Conducting Learning Analytics to Inform Teaching and Learning (CoP LA) paper award in 2022.

Topic

Tracking at-risk student groups from teaching and learning activities in engineering education

Abstract

Tracking student groups, in particular, at-risk student group is a challenging but meaningful work in a large class of an engineering mathematics course, enabling instructors to ascertain how well students are learning and when they need interventions of their studies during the delivery of teaching and learning activities. In this study, two unsupervised learning algorithms, hierarchical clustering and k-means clustering, are used and compared with the use of LMS data such as the level of achievements in online class activities, assignments, a mini-project and a mid-term test for tracking at-risk student groups at the end of weeks 3, 5, 7, 9 and 11 in a 13-week semester of an academic year. Notwithstanding the higher accuracy of both clustering, the k-means clustering significantly outperforms the hierarchical clustering in terms of the precision, recall and f-measure at the end of week 11. It is found that the k-means clustering can be employed to track at-risk students with the recall of 0.640 and the f-measure of 0.533 for the initial intervention of their studies by the end of week 7.

Moderators for Plenary Session 1



Mr Dick CHAN

Educational Development Officers, Educational Development Centre, PolyU

Mr Dick Chan is the Education Development Officer (Senior Learning Technologist) working in the Educational Development Centre at PolyU. He has been working in the LA and eLearning areas for over 10 years. He has developed several LA tools and has presented these tools at international conferences.



Ms Ada TSE

Educational Development Officers, Educational Development Centre, PolyU

Ms Ada Tse is currently working for the Educational Development Centre at PolyU as an Educational Development Officer (Senior Analytics and Evaluation Specialist). She has over 14 years' experience in conducting large-scale surveys and assessments and has been involved in many analytics projects about using data for enhancing learning and teaching and students' learning experience.

Plenary Session 2: Educational Technologies and Innovation



Dr CHAN, Kai-yue Jason, MH, JP

Associate Dean (Information and Development) and Head of IT, PolyU CPCE

Dr CHAN, Kai-yue Jason, MH, JP is the Associate Dean (Information and Development) and Head of IT at CPCE. With a multidisciplinary academic background and diverse experience, Dr Chan is an accomplished professional generalist in public administration, education, artificial intelligence, big data, social media, social commerce, Fintech, Internet of Things, strategy, resource management, leadership, smart city, research methodology and e-governance.

Topic

Mapping innovative learning with immersive VR/AR technologies

Abstract

The future of education is changing. The use of traditional textbooks, PowerPoint slides and videos in delivering lecture and tutorial classes might not be sufficient to motivate student engagement and learning. The traditional ways of teaching and learning should be extended with new forms of teaching and learning by employing advanced technologies such as virtual reality (VR) and augmented reality (AR).

VR/AR plays a significant role in the digital era, especially in the education context. Research on educational applications of VR, as well as research on education use of VR/AR simulations has demonstrated its potential value. Immersive VR/AR simulations enable students to learn their academic subjects in more interactive ways. The adoption of VR/AR technology in teaching and learning achieves better learning experiences with interactive and immersive VR scenes in learning their academic subjects. In this regard, different types of immersive technologies are introduced in the higher education context to enhance students' learning and engagement. The benefits and applications of VR/AR in different scenarios are discussed.

Plenary Session 2: Educational Technologies and Innovation



Mr Michael CHAN

Founder of Icetech Hong Kong Co. Ltd. and International Association of Business Management Simulation

Mr Michael Chan founded Icetech Hong Kong Co. Ltd. in 2011 and the International Association of Business Management Simulation in 2022. He has organized six international intervarsity competitions since 2019 in PolyU and HKMU with thousands of students participating.

Topic

Experiential learning in virtual business simulation

Abstract

In this ever-changing global business environment, it is defined by Volatility, Uncertainty, Complexity, and Ambiguity (VUCA), learner can extend their profession from the real world to a dynamic business marketplace through an AI Simulation platform that a competitive environment is provided to let learner experiment business strategies, test business ideas, and experience the consequences of their actions in a virtual business environment. Through the competition by cohesive team collaboration, learners will learn practical business knowledge and comprehend business data charts so that they can quickly recognize the health and operating conditions of the company and make appropriate business decisions accordingly.

Plenary Session 2: Educational Technologies and Innovation



Dr Lik-hang LEE

Assistant Professor, Department of Industrial and Systems Engineering, Korea Advanced Institute of Science and Technology

Dr Lik-Hang Lee received a PhD degree from Hong Kong University of Science and Technology, and the Bachelor's and M.Phil. degrees from the University of Hong Kong. He is currently an assistant professor at KAIST, South Korea, and the head of the Augmented Reality and Media Laboratory, KAIST.

Topic

When educators meet the metaverse: an overview and challenges

Abstract

The concept of a metaverse is not new; in fact, it was introduced in science-fiction books such as Snow Crash by Neal Stephenson in 1992 and popularized by the Ready Player One film adaptation. In October 2021, when Mark Zuckerberg formally launched the Metaverse project, Google Trends revealed that Metaverse had become a popular term. Increasing numbers of educators and researchers have begun to provide multiple future agendas and implementation possibilities. The increased interest in the educational landscape may be the result of a variety of factors, such as the virtual environment that provides lifelike representations of the self, which may improve the social component of teaching and learning. However, the emerging concept of the metaverse is still relatively new, and there is a need to assess the current level of metaverse-driven education research. Therefore, the purpose of this talk is to introduce the key concepts of the metaverse and highlight the challenges of implementing virtual worlds in our classrooms.

Plenary Session 2: Educational Technologies and Innovation



Dr WUT, Tai-ming Edmund

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE

Dr Edmond Wut is a senior lecturer of the Division of Business and Hospitality Management, PolyU CPCE where his research interest is application of technologies in education. He has published papers in Education + Training, Asia Pacific Education Review, Education Sciences, Asia Pacific Journal of Education and Interactive Technology and Smart Education.



Dr WONG, Ka-lok Adam

Senior Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE

Dr Adam Wong has over 20 years of experience in the Information Technology industry. He has published in international conferences and international peer-reviewed journals. He has also implemented government-funded research and education enhancement projects.

Topic

Does learner generated video matters? Student engagement and learning effectiveness in learning computer software

Abstract

Students usually forget what they learned in using the software. In the past, students were asked to practice many times before they really remember and master the steps. The purpose of this study is to test whether learner generated video (LGV) could enhance the effectiveness of the learning. Pre-test, post-test and control group experimental design was used in the study. After students learn how to use the software, they are given the task to finish it. Students were asked about their learning experience. They are divided into two groups. One group of students was instructed to use a video software to record what they have been done. Another group of students did nothing (control group). Both groups of students were asked to do the similar task again. It was found that the first group of students recalled what they had learned significant better than the control group. This study provided insights to educators and school administrators to design effective curriculum and provides empirical evidence of constructivist theory. Students learned the software when they construct their own representations.

Moderators for Plenary Session 2



Dr NG, Mei-lan Peggy

Principal Lecturer, Division of Business and Hospitality Management, PolyU CPCE

Dr Peggy Ng's research interests include youth behavioral studies, digital marketing and knowledge management. Her work has been published in academic journals, such as Journal of Knowledge Management, Higher Education, Online Information Review, Journal of Marketing Management, Education + Training, International Journal of Leadership in Higher Education, and Young Consumers.



Dr WONG, Wai-sum Phoebe

Senior Lecturer, Division of Business and Hospitality Management, PolyU CPCE

Dr Phoebe Wong is a Senior Lecturer of the Division of Business and Hospitality Management. Before gaining her PhD in Marketing from Lancaster University, Dr Wong obtained her MA in General Linguistics from the University of Helsinki, and MSc in Marketing from the National University of Ireland.

Plenary Session 3: Technology-enhanced Professional Development



Dr MA Qing

**Associate Professor, Department of Linguistics and
Modern Language Studies (LML), Education University of Hong Kong**

Dr Ma Qing is an associate professor at the Department of Linguistics and Modern Language Studies, The Education University of Hong Kong. Her main research interests include second language vocabulary acquisition, corpus linguistics, corpus-based language pedagogy (CBLP), computer assisted language learning (CALL) and mobile assisted language learning (MALL).

Topic

How did English teachers develop their corpus-based language pedagogy: a case study

Abstract

Corpus linguistics proves to be an innovative and effective approach to language studies and analyses. However, a corpus-based linguistic approach remains largely unknown to the majority of the professional teaching community for various reasons. Adopting a case study approach, this research investigated two university English teachers' engagement of acquiring corpus-based language pedagogy (CBLP), integration of the learned CBLP into their design of corpus-based lessons, and implementation and evaluation of their corpus-based classroom teaching. Shulman's (1987) framework of developing pedagogical content knowledge was adopted as an analytical framework for data analysis. The results show both teachers have acquired a good level of CBLP while taking different routes that are shaped by various contextual factors, including their initial corpus literacy, selected topic of the linguistic skills, theories for informing teaching, student background and mode of teaching. Implications are provided as for how to help English teachers develop their CBLP for addressing needs arising from their specific teaching contexts.

Plenary Session 3: Technology-enhanced Professional Development



Dr LAM, Wai-ming Edmond

Senior Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE

Dr Edmond LAM obtained his PhD degree in Construction Management, and has worked for research projects in construction safety, construction management, and teaching and learning. He has published research papers in refereed academic journals and international conference proceedings, and he is currently researching sustainability practices in high-rise residential buildings.



Dr Anand VYAS

Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE

Dr A. Vyas received his Ph.D. in Physics and has worked at various research and teaching positions. His current research interest is in the area of effective teaching and learning. He also serves the professional community in the capacity of a reviewer for many scientific journals and is also an editorial board member of several scientific journals.

Topic

Providing research experience to undergraduate students in the latest technological environment for professional development

Abstract

The pace of innovations in technology pushes the employees to constantly be in pace with the technological advancement and innovations. Moreover, the current global market extensively utilizes and demands a constant update and upgrade in technology thus requiring the workforce to be well versed with innovative technology. This is even more applicable in the field of engineering since technology encompasses the systematic study of the structure and behavior of the functional world, which is closely related to the work of engineers. Recently, several emerging engineering applications are in the areas of Building, Electrical and Mechanical Engineering, and have a lot of unidentified potential. In this study, it is ascertained that research experience given to engineering undergraduate students can allow them to develop their capabilities not only in their career but also the frontiers of engineering in our society. The aim of the research experience provided to students via on campus research appointments, is to utilize the latest technologies that are taught in courses in a practical environment, which is commensurate with the market. Such student involvement can also strengthen the educational organization's position in the academic world for providing the students with the professional work-based skills prior to their graduation.

Moderators for Plenary Session 3



Dr WONG, Ka-lok Adam

**Senior Lecturer, Division of Science, Engineering and Health Studies, PolyU CPCE;
Deputy Director, CPCECPR**

Dr Wong has over 20 years of experience in the Information Technology industry. He has published in international conferences and international peer-reviewed journals. He has also implemented government-funded research and education enhancement projects.



Dr LO, On-ting

**Lecturer, Division of Social Sciences, Humanities and Design, PolyU CPCE;
Member, CPCECPR**

Dr On-ting Lo's Bachelor of Cognitive Science degree emphasises different disciplines related to the human mind such as cognitive and perceptual psychology, artificial intelligence, linguistics, neuroscience, and philosophy. His research expertise during PhD studies was mainly related to visual perception. His current research interests include psychology of materialism. He is also enthusiastic in conducting scientific studies which unveil the mechanisms of life goal realisation and actualisation.

VII. General Information

CPCE Centre for Pedagogic Research (CPCECPR)



Follow us on IG

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CPCECPR Website: <https://cpr.cpce-polyu.edu.hk/>

Conference Website: <https://cprconf2023.cpce-polyu.edu.hk/>

Conference Venue

UG06, PolyU Hung Hom Bay Campus

8 Hung Lok Road, Hung Hom, Kowloon

(Exit B1, MTR Hung Hom Station or Exit B, MTR Whampoa Station)



Luncheon Venue

Crystal Harbour Restaurant

3/F, Harbourview Horizon, 12 Hung Lok Road, Hung Hom, Kowloon

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