



香港教育大學  
The Education University  
of Hong Kong

大學正名十周年  
The 10th Anniversary of  
the University's Retitling

# AI4EDU

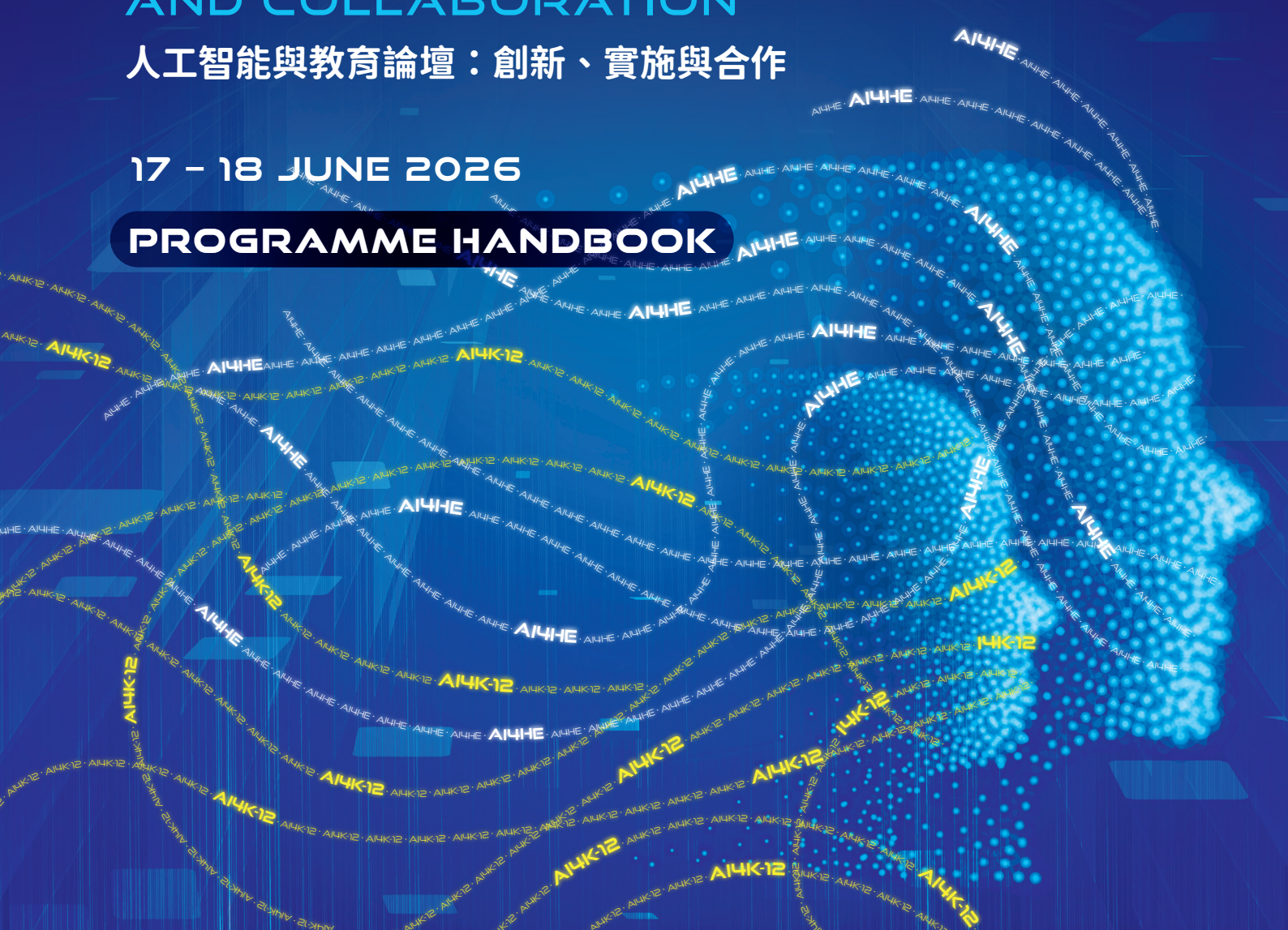
## FORUM

INNOVATION,  
IMPLEMENTATION  
AND COLLABORATION

人工智能與教育論壇：創新、實施與合作

17 - 18 JUNE 2026

PROGRAMME HANDBOOK





# AI4EDU

FORUM 人工智能與教育論壇

INNOVATION,  
IMPLEMENTATION  
AND COLLABORATION

創新、實施與合作

# TABLE OF CONTENTS

<b>1</b>	<b>Welcoming Messages</b>	
	■ Message from the President and Forum Advisory Committee Chair	2
	■ Message from the Vice President (Academic) and Forum Advisory Committee Co-Chair	3
	■ Message from the Assistant Vice President (Artificial Intelligence and Education Innovation) and Forum Organising Committee Chair	4
	■ Message from the Director of the Centre for Learning, Teaching and Technology and Forum Organising Committee Co-Chair	5
<b>2</b>	<b>Organisation</b>	6
	Forum Advisory Committee	
	Forum Organising Committee	
<b>3</b>	Keynote Speech	9
<b>4</b>	AI4HE Panel Discussion	10
<b>5</b>	AI4K-12 Panel Discussion	11
<b>6</b>	Industry Insights Sharing	12
<b>7</b>	AI4HE Symposium (1)	15
	AI4HE Symposium (2)	19
	AI4HE Symposium (3)	22
<b>8</b>	AI4K-12 Symposium (1)	26
	AI4K-12 Symposium (2)	30
<b>9</b>	AI4K-12 Concurrent Sessions (1)	32
	AI4K-12 Concurrent Sessions (2)	37
<b>10</b>	Programme at a Glance	44
<b>11</b>	Detailed Programme	45
<b>12</b>	Venue & Transportation	48

## Message from the President and Forum Advisory Committee Chair



### Professor LEE Chi-Kin John

President,

Director, Academy for Applied  
Policy Studies and Education  
Futures,

Director,  
Academy for Educational  
Development and Innovation,

Chair Professor of Curriculum  
and Instruction,

The Education University of  
Hong Kong

Welcome to the AI4EDU Forum: Innovation, Implementation and Collaboration, hosted by The Education University of Hong Kong (EdUHK). It is a great pleasure to greet you on this significant occasion, celebrated as part of the 10th Anniversary of EdUHK's Retitling.

This anniversary marks a decade of purposeful progress and institutional evolution. Over the past ten years, EdUHK has strengthened its role as a leading university in education, while significantly expanding its multidisciplinary research capacity and global engagement. The AI4EDU Forum reflects our ongoing commitment as a comprehensive university to anticipate change and shape the future of learning in a rapidly evolving world.

Artificial Intelligence (AI) is increasingly influencing how education systems operate and how learning experiences are designed. It is opening new possibilities for personalised pathways, intelligent learning support, and more responsive educational environments. At the same time, it invites institutions to exercise thoughtful leadership in determining how such technologies are integrated into classrooms, campuses, and communities.

At EdUHK, we are guided by the belief that innovation must serve educational purposes. Our vision emphasises the integration of advanced technologies with strong professional values and a humanistic commitment. In this context, AI should be developed and applied in ways that strengthen teaching professionalism, enrich student learning, and contribute positively to society.

This Forum provides a platform for dialogue across sectors and disciplines. By convening educators, scholars, researchers, and partners from the Hong Kong SAR, the Chinese Mainland, and the international community, we aim to encourage an exchange that connects research insights with practical experience and policy development.

As we look ahead, the sustainable advancements in AI-enabled education will depend on collaboration, mutual learning, and shared responsibility. EdUHK remains dedicated to fostering partnerships that advance knowledge, inform practice, and contribute to the broader educational landscape.

I extend my sincere appreciation to all speakers, collaborators, and participants for your valuable contributions. May this Forum stimulate meaningful discussion and inspire continued progress in the thoughtful advancement of AI in education.

I wish you all a productive and rewarding Forum.

## Message from the Vice President (Academic) and Forum Advisory Committee Co-Chair

Thank you for joining the AI4EDU Forum: Innovation, Implementation and Collaboration.

At The Education University of Hong Kong (EdUHK), we are committed to advancing educational innovation through our Education-plus framework, which places strong emphasis on the integration of Artificial Intelligence (AI) and other emerging technologies within educational contexts. This strategic approach aims to enhance learning and teaching, teacher education, and related disciplines by cultivating outstanding, ethically responsible educators and professionals dedicated to lifelong learning. As outlined in EdUHK's Learning and Teaching Plan 2024-2027, we seek to harness the transformative potential of AI to reshape educational practices and improve learning outcomes, thereby contributing to the advancement of higher education and society at large.

The AI4EDU Forum provides a valuable platform for researchers, educators, policymakers, and industry practitioners to exchange insights, reflect on lessons learned, and explore future directions. By fostering both local and international partnerships, the Forum promotes a collaborative approach to AI in education and facilitates meaningful dialogue on best practices for integrating AI across diverse K-12 subject disciplines.

As EdUHK celebrates the 10th Anniversary of its Retitling, this Forum also underscores our enduring commitment to innovation, partnership, and professional excellence. We are deeply grateful to our keynote speaker, panellists, presenters, and contributors for sharing their expertise, and to all participants for your active engagement.

I would also like to extend my heartfelt appreciation to the Organising Committee, led by the Centre for Learning, Teaching and Technology (LTTTC) of EdUHK, whose dedication and hard work have been instrumental in making this Forum possible.

I wish you a rewarding and inspiring Forum.

Thank you.



### Professor CHENG May Hung May

Vice President (Academic),  
Executive Co-Director,  
Academy for Applied Policy  
Studies and Education  
Futures,

Chair Professor of Teacher  
Education,

The Education University of  
Hong Kong

## Message from the Assistant Vice President (Artificial Intelligence and Education Innovation) and Forum Organising Committee Chair



### Professor XU Guandong

Assistant Vice President  
(Artificial Intelligence and  
Education Innovation),

Director, University Research  
Facility of Data Science and  
Artificial Intelligence,

Chair Professor of Artificial  
Intelligence,

The Education University of  
Hong Kong

The AI4EDU Forum, commemorating the 10th Anniversary of EdUHK's Retitling, underscores the University's strategic commitment to advancing artificial intelligence (AI) in education through research excellence, institutional innovation, and global engagement. Under the theme "Innovation, Implementation and Collaboration," the Forum provides an international platform for examining the responsible governance and effective integration of AI across educational systems.

I am profoundly grateful to the distinguished keynote speaker and international scholars for joining the AI4EDU Forum and for sharing insights that will help shape future directions in adopting AI in education: Professor Dirk IFENTHALER (University of Mannheim and Curtin University), Professor FENG Zhenhua (Jiangnan University), Professor ZHANG Gexiang (Chengdu University of Information Technology), Dr DAI Haimin (Shanghai Jiao Tong University), Professor LIU Ang (University of New South Wales), Professor JIANG Bo (East China Normal University), and Professor ZHU Jia (Zhejiang Normal University). I would like to extend my sincere appreciation to the leading industry practitioners, local school principals, and school representatives whose efforts bridge research and real-world implementation in schools.

I would also like to express my deepest gratitude to the members of the Forum Advisory and Organising Committees: Professor LEUNG Pui Wan Pamela, Professor NERI Ferrante, Professor CHAN Ka Shing Kevin, Dr CHENG Kwok Shing Gary, Dr FU Hong, and Dr SO Chi Fuk Henry. Special thanks go to our colleagues from the Centre for Learning, Teaching and Technology (LTTTC) for their tremendous efforts in organising a smooth and enriching Forum.

I wish you all a fruitful experience at the AI4EDU Forum.

Thank you.

## Message from the Director of the Centre for Learning, Teaching and Technology and Forum Organising Committee Co-Chair

The AI4EDU Forum advances rigorous, informed dialogue on the responsible integration of artificial intelligence (AI) in K-12 schools and higher education. Held as part of the 10th Anniversary of EdUHK's Retitling, it reaffirms the University's leadership in AI-enhanced education and convenes key stakeholders at a pivotal moment of transformation.

Structured around AI4K-12 and AI4HE, the two-day Forum features a keynote, an Industry Insights session, two panel discussions, five themed symposia, and two concurrent sessions exploring AI implementation across Language, Arts, Science, Mathematics, Technology, Physical Education, Digital Wellbeing, Assessment, and Special Educational Needs.

I would like to express my sincere appreciation to the distinguished principals from local K-12 schools for their valuable contributions: Principal CHAN Chi Hang Nelson (Cho Yiu Catholic Primary School), Principal CHAN David (G.T. (Ellen Yeung) College Primary Section), Principal CHEN Dion (Ying Wa College), Principal CHENG Ka Po Shirley (C.C.C. Mong Wong Far Yok Memorial Primary School), Principal CHEUNG Chok Fong (Yaumati Catholic Primary School), Vice Principal CHIU Peng Hang Raymond (Tung Wah Group of Hospitals Kwok Yat Wai College), Principal CHU Wai Lam (Fung Kai No. 1 Primary School), Principal HUI Hon Yin (St. Peter's Secondary School), Principal KAM Wai Ming (HKSKH Bishop Hall Secondary School), and Principal LO Pui Shan (Hennessy Road Government Primary School (Causeway Bay)).

The success of the AI4EDU Forum would not have been possible without the collective efforts of the Forum Advisory and Organising Committees, as well as my colleagues at the Centre for Learning, Teaching and Technology (LTTC). Their professionalism, dedication, and tireless commitment have been invaluable throughout.

I wish you all an enriching and inspiring experience at the AI4EDU Forum.

Thank you.



**Dr**  
**CHENG Kwok Shing**  
**Gary**

Director, Centre for Learning,  
Teaching and Technology,

Associate Co-Director, Global  
Institute for Emerging  
Technologies,

Associate Professor,  
Department of Mathematics  
and Information Technology,

The Education University of  
Hong Kong

## 2 Organisation

### Organiser

Centre for Learning, Teaching and Technology (LTTTC)

### Co-organisers

- Academy for Applied Policy Studies and Education Futures (AAPSEF)
- Academy for Educational Development and Innovation (AEDI)
- Faculty of Education and Human Development (FEHD)
- Faculty of Humanities (FHM)
- Faculty of Liberal Arts and Social Sciences (FLASS)
- Artificial Intelligence and Digital Competency Education Centre (AIDCEC)
- Global Institute for Emerging Technologies (GIET)
- School Partnership and Field Experience Office (SPFEO)
- Artificial Intelligence Research and Education Alliance (AIREA)
- Association of I.T. Leaders in Education (AiTLE)  
資訊科技教育領袖協會
- The Hong Kong Association for Computer Education (HKACE)  
香港電腦教育學會
- Hong Kong Subsidized Primary Schools Council (SPSC)  
香港津貼小學議會
- Hong Kong Subsidized Secondary Schools Council (HKSSSC)  
香港津貼中學議會

# Forum Advisory Committee

## Advisory Committee Chair

*Professor* **LEE Chi-Kin John**

President

Chair Professor of Curriculum and Instruction  
The Education University of Hong Kong

## Advisory Committee Co-Chair

*Professor* **CHENG May Hung May**

Vice President (Academic)

Chair Professor of Teacher Education  
The Education University of Hong Kong

*Professor* **YEUNG Siu Sze Susanna**

Associate Vice President (Quality Assurance)

Professor, Department of Psychology  
The Education University of Hong Kong

## Advisory Committee Members

*Professor* **LEUNG Pui Wan Pamela**

Acting Dean and Associate Dean, Faculty of Humanities  
Professor (Practice), Department of Chinese Language Studies  
The Education University of Hong Kong

*Professor* **NERI Ferrante**

Dean, Faculty of Liberal Arts and Social Sciences  
Chair Professor of Machine Learning and Artificial Intelligence  
The Education University of Hong Kong

*Professor* **CHAN Ka Shing Kevin**

Acting Dean and Associate Dean, Faculty of Education and  
Human Development  
Professor, Department of Psychology  
The Education University of Hong Kong

# Forum Organising Committee

## Forum Organising Committee Chair

### *Professor* **XU Guandong**

Assistant Vice President (Artificial Intelligence and Education Innovation)  
Director, University Research Facility of Data Science and  
Artificial Intelligence  
Chair Professor of Artificial Intelligence  
The Education University of Hong Kong

## Forum Organising Committee Co-Chair

### *Dr* **CHENG Kwok Shing Gary**

Director, Centre for Learning, Teaching and Technology  
Associate Co-Director, Global Institute for Emerging Technologies  
Associate Professor, Department of Mathematics and Information Technology  
The Education University of Hong Kong

## Forum Organising Committee Members

### *Dr* **FU Hong**

Associate Director, Centre for Learning, Teaching and Technology  
Associate Professor, Department of Mathematics and Information Technology  
The Education University of Hong Kong

### *Dr* **SO Chi Fuk Henry**

Associate Director, Centre for Learning, Teaching and Technology  
Senior Lecturer, Department of Mathematics and Information Technology  
The Education University of Hong Kong

## Secretariat

**Centre for Learning, Teaching and Technology (LTTC)**

## 3 Keynote Speech

### Bridging Cognition and Computation: A Critical Framework for Hybrid Intelligence in Education

#### Chair



*Professor*  
**XU Guandong**

Chair Professor of Artificial Intelligence  
Assistant Vice President (Artificial Intelligence and Education Innovation)  
Director, University Research Facility of Data Science and Artificial Intelligence  
The Education University of Hong Kong

#### Speaker



*Professor*  
**Dirk IFENTHALER**

Professor and Chair of Learning, Design and Technology  
University of Mannheim, Germany  
UNESCO Co-Chair on Data Science in Higher Education Learning and Teaching, Curtin University, Australia

#### Abstract

The intersection of human cognition and computational intelligence represents one of the most consequential and theoretically complex frontiers in contemporary educational research. As artificial intelligence becomes increasingly embedded in education, a pressing need emerges to move beyond surface-level applications and develop frameworks that account for how human and machine agents jointly process, interpret, and act upon information in educationally meaningful ways. This talk addresses that need by proposing a critical conceptual framework for understanding hybrid intelligence through the lens of information processing theory. Grounded in foundational perspectives from cognitive psychology, distributed cognition, and the learning sciences, this presentation revisits classical information processing models and examines their explanatory adequacy and limitations when applied to contemporary human-AI configurations. Building on this critical foundation, the presentation introduces a structured framework that distinguishes key dimensions of hybrid information processing and the conditions under which machine-generated outputs are productively assimilated into human reasoning and decision-making. It is contended that advancing education in the age of artificial intelligence demands not a choice between human and machine intelligence, but a rigorous and theoretically informed commitment to understanding how the two can be meaningfully and equitably bridged.

#### Biography

Dirk IFENTHALER is a Professor and Chair of Learning, Design and Technology at the University of Mannheim, Germany, and UNESCO Co-Chair on Data Science in Higher Education Learning and Teaching at Curtin University, Australia. Dirk's research focuses on the intersection of cognitive psychology, educational technology, data analytics, and organisational learning. He received an honorary doctorate in educational science (doctor honoris causa) from the University of Eastern Finland in 2024. Dirk IFENTHALER is the Editor-in-Chief of the Technology, Knowledge and Learning and Editor-in-Chief of Educational Technology & Society.

## 4 AI4HE Panel Discussion

### Beyond the Black Box: Human Judgement and Learning in the Age of Foundation Models

#### Abstract

This panel explores how higher education should respond to this new reality. Rather than viewing generative AI simply as a threat to academic integrity or as a shortcut for productivity, the discussion will examine how these technologies can become part of a critical and reflective learning process. Particular attention will be devoted to how students formulate queries, interpret outputs, identify limitations, verify information, and iteratively refine interactions with AI systems.

#### Chair



*Professor*  
**NERI Ferrante**

Chair Professor of Machine Learning and Artificial Intelligence  
Dean, Faculty of Liberal Arts and Social Sciences  
The Education University of Hong Kong

#### Panellists



*Professor*  
**FENG Zhenhua**

Professor of Computer Vision and Machine Learning,  
School of Artificial Intelligence and Computer Science  
Jiangnan University



*Professor*  
**ZHANG Gexiang**

Professor, School of Automation  
Chengdu University of Information Technology

# 5 AI4K-12 Panel Discussion

## 應用人工智能釋放中小學教師及學生的潛能： 人工智能普及認知及應用人工智能於學科學習

### Abstract

香港教育大學過去六年率先推動人工智能普及認知及開始研究如何把人工智能融入學校教育，致力培養面向未來的一代。這些舉措旨在讓學生掌握基礎的人工智能知識，並具備在學習中運用人工智能的能力。我們正在香港小學進行試點研究，將人工智能應用於中國語文、英國語文、數學、小學科學和小學人文等五個學科的特定學習課題。研究初步證明，我們可以運用人工智能於學科學習，引導教師熱情地思考。我們正在進一步研發教學方法，鼓勵學生在課堂上運用人工智能，發展他們的高階思維。本場小組討論將探討教師在教授人工智能的教學方法，及在課堂上運用人工智能的教學方法。

### Chair



#### 江紹祥教授

數學與資訊科技學系講座教授  
人工智能及數碼能力教育中心總監  
香港教育大學

### Panellists



#### 陳志恆校長

(天主教香港教區代表)  
祖堯天主教小學



#### 勞佩珊校長

(官立小學校長協會代表)  
軒尼詩道官立小學  
(銅鑼灣)



#### 張作芳校長

(九龍地域校長會聯會代表)  
油蔴地天主教小學



#### 許翰賢校長

(津貼中學代表)  
聖伯多祿中學



#### 趙炳鏗副校長

(東華三院代表)  
東華三院郭一葦中學



#### 鄭家寶校長

(教育評議會代表)  
中華基督教會蒙  
黃花沃紀念小學

## 6 Industry Insights Sharing

### 以人工智能赋能学校：从认知、课堂到实践应用

#### Chair



#### 符欲均 博士

教学科技中心和数学及  
资讯科技系助理教授  
香港教育大学

#### Speaker



#### 陈子晞 先生

销售总监  
EVI Services Limited  
思进计算机香港有限公司

### 人工智能在中学、小学及幼儿园教育中的应用与实践

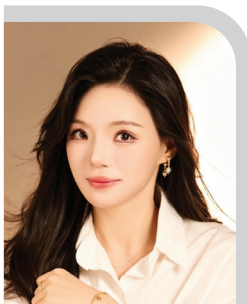
#### Abstract

介绍人工智能在中学、小学及幼儿园教育中的最新创新实践，涵盖生成式人工智能工具、智能评估系统及多媒体互动教材等范畴，透过真实案例，分析当中的机遇与挑战。为中学、小学及幼儿园教育工作者提供切实可行的策略建议，共同探索人工智能赋能教育的未来发展方向。

#### Biography

陈子晞先生现任 EVI Services Limited、思进计算机香港有限公司销售总监，拥有逾20年教育科技销售及市场推广经验。彼深耕香港中学、小学及幼儿园教育市场，凭借丰富的行业触觉与专业知识，引领教育科技转型，为教育机构、教师及家长提供切合需要的优质教育科技方案。

## Speaker



### 苏莉莉女士

「创思课堂」运营总监  
海亮科技集团

## AI驱动的中小学校数字化变革 —— 海亮教育实践案例

### Abstract

本次分享聚焦中小学数字化改革的核心命题，基于布鲁姆「学习的两个标准差」经典教育理论，结合海亮教育4年一线落地实践，提出AI赋能教育的核心目标——让学生无限接近一对一精准辅导的学习效果。

分分享从「一道题、一堂课、一个人」三个核心维度，拆解了海亮教育AI创思课堂的完整落地范式，展示了智能批改、精准教学、课堂重构、核心素养培养等环节的真实实践成果，最终呈现了海亮教育覆盖学生德育、教研体系、精准教学的全链路数字化教育体系，为AI时代的中小学数字化变革提供了可复制的一线实践路径。

### Biography

苏莉莉，现任海亮科技集团「创思课堂」运营总监具备10余年K12学校数字化转型经验，受聘为多所内地中小学数字化教学改革顾问，主导的“AI课堂改革方案”已在内地数十所学校落地。

## Speaker



### 王硕 教授

北京恒挚科技有限公司总监  
深圳理工大学人工智能学院产业教授  
重庆大学建筑城规学院微专业校外负责人  
中科（广东）科学集团有限公司总监  
武汉人因工程技术研究院部门负责人

## 认知科学工具：面向教育领域的多模态神经教学方案

### Abstract

报告基于认知神经科学、交叉学科理论与教育人工智能，构建一体化认知科学教学工具。通过融合视觉、行为、情绪等多维度学习数据，实时捕捉学生认知状态、评估学习负荷与知识掌握情况，实现教学过程可观测、可量化、可优化。依托神经可塑性原理，有效降低认知损耗、强化注意力维持与知识深度学习，推动课堂由经验驱动向认知数据驱动转型，期待为高校教学创新与教育智能化改革提供新型实践路径与解决方案。

### Biography

北京恒挚科技有限公司总监、深圳理工大学人工智能学院产业教授，重庆大学建筑城规学院微专业校外负责人，中科（广东）科学集团有限公司总监、武汉人因工程技术研究院部门负责人。擅长利用视、听、嗅、味、触及声、光、电、磁等刺激方式，结合眼动仪、脑电、近红外、核磁等心理认知神经技术，在教育、心理、脑机、美学、人因等领域中应用。从事相关行业多年，推动神经人因技术在国内快速发展。秉持“以人为中心”的理念及“为中国科研事业尽一份”的口号，促使包括经济、设计、地理、新闻、航空、航天、航海、计算机、自动化、食品、建筑、景观、艺术等十数个领域开始与该技术结合。

# 7 AI4HE Symposium (1)

## Support for Self-Regulated Learning and Creative Thinking in the Generative AI Era

### Chair and Speaker



*Professor*  
**SONG Yanjie**

Professor, Department of Mathematics and Information Technology  
Associate Director, Centre for Excellence in Learning and Teaching  
Associate Co-Director, Academy for Applied Policy Studies and Education Futures  
The Education University of Hong Kong

### Rethinking Learning Support in the AI Era: Embodied AI Tutors for Self-Regulated Learning

#### Abstract

Despite growing global interest in AI-powered intelligent tutoring systems in higher education, the majority of learning management systems (LMS) lack mechanisms for providing continuous, personalised, and interaction-based support for students' self-regulated learning (SRL). This sharing addresses the gap by integrating a 3D digital human tutoring system, iChat-tutor, into a learning management system to deliver "embodied facilitation" that enhances students' SRL. Grounded in the SRL framework, iChat-tutor provides metacognitive, cognitive, and socio-emotional support aligned with the forethought, performance, and reflection phases of learning. A demonstration will be provided for its implementation.

#### Biography

Professor Yanjie Song is Professor at the Department of Mathematics and Information Technology, Associate Co-Director of the Academy for Applied Policy Studies and Education Futures (AAPSEF), Assistant Dean of Graduate School and Associate Director of CELT, The Education University of Hong Kong. She holds a PhD from The University of Hong Kong and an MEd from the University of Leeds. Her research spans AR, VR, MR, the metaverse, AI in education, and multimodal learning analytics. She has led the development of award-winning platforms, including VocabGo, Learningverse, LearningverseVR and EmoCare, and the new development of Embodyverse and iChat system, with multiple patents secured. Prof Song has received competitive research funding and holds leadership roles in APSCE. She is listed among the world's top 2% most-cited scientists by Stanford University.

## Speaker



*Dr*  
**KOHNKE Lucas**

Senior Lecturer, Department of English Language Education  
Academic Coordinator, Centre for Learning, Teaching, and Technology  
The Education University of Hong Kong

## Enhancing Creativity and Higher-Order Thinking with AI in Higher Education and Vocational Settings

### Abstract

The rapid development of generative artificial intelligence (GenAI) is reshaping higher education pedagogy. This session equips university and vocational educators with evidence-informed, scalable ways to embed AI into teaching, assessment, and supervision to enhance students' creativity and higher-order thinking across undergraduate, postgraduate, and vocational programmes. Drawing on microlearning principles and practical modules, the session demonstrates AI-enhanced activities using literary and multimodal materials alongside discipline-specific tasks (creative synthesis, critical interrogation, collaborative generation, and peer review). It also addresses assessment designs that uphold standards and academic integrity, staff development and moderation procedures, and lightweight provenance and reflection routines to document student AI use. Participants will leave with ready-to-use activity templates, marking rubrics, and guidance on institutional implementation.

### Biography

Dr Lucas Kohnke is a Senior Lecturer at The Education University of Hong Kong, specializing in technology-supported teaching and learning, teacher professional development, and the use of emerging technologies, particularly generative AI, in education. He holds a Doctor of Education in TESOL from the University of Exeter. His research focuses on the role of artificial intelligence in language education and teacher development. Before joining academia, he worked in Sweden, China, Thailand, South Korea, the Sultanate of Oman, and Afghanistan as an EAP/ESP teacher, teacher educator, and assessor. He has published more than 100 articles in leading journals, including TESOL Quarterly, ReCALL, System, Computers and Education: Artificial Intelligence and RELC Journal. In 2024 and 2025, Stanford University recognized him among the world's top 2% most-cited scientists.

## Speaker



*Dr*  
**LIU Yiqi April**

Assistant Professor, Department of English Language Education  
Acting Head, Centre of Language in Education  
The Education University of Hong Kong

### **Green AI for Higher Education: A Teacher-Developed AI-assisted Dialogue System (ADS) for Cultivating Ecological Linguaging Competencies (ELC) in Content and Language Integrated Learning (CLIL)**

#### **Abstract**

Effective professional communication is fundamental, yet English-as-an-additional-language (EAL) students often struggle with the sociocultural and pragmatic demands of multilingual workplace settings. This talk introduces the AI-assisted Dialogue System (ADS), a teacher-developer co-designed platform that trains Hong Kong EAL nursing students through realistic, scenario-based simulations using pre-recorded local patient voices in Cantonese, English and Mandarin. Grounded in the Ecological Linguaging Competencies (ELC) and Content and Language Integrated Learning (CLIL) frameworks, the ADS treats “language” as a verb, i.e., the whole-body, distributed sense-making that emerges in interaction with interlocutors, artefacts, and the broader environment, more than the transmission of fixed language patterns. Crucially, the ADS embodies the notion of “Green AI”, i.e., edge-centric, offline-first and energy-efficient. Drawing on multimodal discourse analysis of student-patient interactions, this talk shows how localized, pedagogically-driven AI can sustainably facilitate tertiary and vocational English-medium healthcare education where students need to command both language/linguaging and content knowledge.

#### **Biography**

Dr Liu’s research interests include discourse analysis, sociolinguistics, bilingual education – particularly Content and Language Integrated Learning (CLIL) and Language across the Curriculum (LAC) – as well as critical cultural studies. She has conducted extensive research on the curriculum design and pedagogical practices of English-medium instruction, LAC, and CLIL across diverse national and regional contexts. More recently, her work has focused on two major strands: fostering knowledge co-construction in English-medium, LAC, and CLIL classrooms through translanguaging and trans-semiotizing across educational stages; and promoting the development of Green AI for CLIL.

## Speaker



*Professor*  
**MA Qing Angel**

Professor, Department of Linguistics and Modern Language Studies  
Associate Dean (Research and Postgraduate Studies), Faculty of Humanities  
The Education University of Hong Kong

## GenAI Literacy in Language Education: A Global Exploration and Comprehensive Framework

### Abstract

As generative AI (GenAI) tools proliferate in education, effective integration remains both an opportunity and a challenge, varying by discipline and context. In language education, we propose “ChatGPT literacy” to guide responsible, effective use. We developed and validated a six-construct framework—benefits, limitations, prompts, evaluation of responses, assessment with ChatGPT, and ethics—capturing how ChatGPT can support the instructional cycle. A mixed-methods survey of 492 language teachers across 41 countries combined Likert-scale measures and thematic coding of open-ended responses. Results confirmed the framework’s construct validity and revealed widespread use of ChatGPT from materials design to assessment, alongside concerns about quality control and ethical practice. The framework specifies the competencies teachers need to deploy ChatGPT productively while safeguarding learning integrity. Findings inform teacher education, curriculum design, platform development, and policy, offering practical guidance for responsible adoption and helping stakeholders align pedagogical goals with the affordances and limits of ChatGPT and other GenAI.

### Biography

Qing Ma is Professor at the Department of Linguistics and Modern Language Studies and currently serves as Associate Dean (Research & Postgraduate Studies) at Faculty of Humanities, The Education University of Hong Kong. Her main research interests include second language vocabulary acquisition, corpus linguistics, corpus-based literature studies, corpus-based language pedagogy (CBLP), computer assisted language learning (CALL), mobile assisted language learning (MALL), and AI in language education. Professor Ma’s research bridges theory and practice, making significant contribution to the fields of language technology and language teaching, including TESOL. She has received several international awards, including the 2025 TESOL Award for Excellence in Research (the United States, 2025), the Esperanto “Access to Language Education” Award (the United States, 2020), and a Silver Medal at the 47th International Exhibition of Inventions of Geneva (Switzerland, 2019).

# AI4HE Symposium (2)

## Transformative GenAI in Higher Education: Teacher Competencies, Human-AI Inquiry, and Design Learning

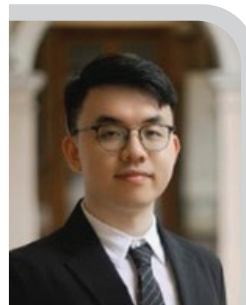
### Chair



*Professor*  
**LIM Cher Ping**

Chair Professor of Learning Technologies and Innovation,  
Department of Curriculum and Instruction  
Co-Director, Global Institute for Emerging Technologies  
The Education University of Hong Kong

### Speaker



*Dr*  
**BA Shen**

Assistant Professor, Department of Curriculum and Instruction  
The Education University of Hong Kong

## Empowering Higher Education Teachers: A Competency Framework for Transformative GenAI Integration

### Abstract

In the age of generative artificial intelligence (GenAI), higher education teachers need new competencies to guide meaningful teaching and learning innovation. This talk introduces a GenAI competency framework developed through a collaborative research project between The Education University of Hong Kong and Shanghai Jiao Tong University. Grounded in three transformative ideas, the framework promotes student-driven GenAI use, pedagogical innovation that leverages GenAI's potential, and teachers' critical role in supporting responsible and effective GenAI integration. The talk will discuss how the framework can inform curriculum design, pedagogy, and assessment, helping teachers reimagine teaching practices in GenAI-mediated learning environments.

### Biography

Dr Ba Shen is an Assistant Professor in the Department of Curriculum and Instruction at The Education University of Hong Kong (EdUHK), and Associate Programme Leader of the MSc in Learning Sciences and Smart Education. His work sits at the forefront of educational technology and the learning sciences, with a particular focus on learning analytics, inquiry-based learning, and AI-empowered education. He has led and contributed to competitive research projects funded by major agencies, including the Hong Kong Research Grants Council and the National Natural Science Foundation of China. Before joining EdUHK, he held research and teaching positions at The University of Hong Kong and was a visiting scholar at The Ohio State University. He serves on the editorial boards of leading international journals, including British Journal of Educational Technology and Computers & Education, and is a board member of the International Chinese Association for Educational Technology.

## Speaker



Dr  
**DAI Haimin**

Associate Professor in Education, School of Education  
Shanghai Jiao Tong University

## Understanding Human-Generative AI Collaboration in Academic Inquiry: A Multilevel Analysis

### Abstract

This speech will share recent research examining how graduate students engage with Generative Artificial Intelligence (GenAI) during research inquiry and how critical thinking disposition (CTD) shapes human-GenAI collaboration. Using a process-oriented mixed-method design, the study followed first-year graduate students in Education over five months as they integrated GenAI into research activities. The findings suggest that students generally positioned GenAI as a supportive yet subordinate partner in academic inquiry. More importantly, CTD shaped the quality and nature of human-GenAI collaboration rather than the frequency of technology use. Students with stronger CTD demonstrated more iterative, critical, and purposeful engagement with GenAI throughout the research process. By highlighting how cognitive dispositions influence researchers' interactions with GenAI, this talk contributes to emerging discussions on human-GenAI collaboration in higher education and offers implications for developing adaptive pedagogy in the GenAI era.

### Biography

Dr. Rita Hai Min Dai is an Associate Professor in Education at Shanghai Jiao Tong University. Her research examines technology-assisted pedagogy, professional agency, and human-AI interaction. She has published in internationally leading journals including *Computers & Education*, *Computers in Human Behavior*, *British Journal of Educational Technology*, *Interactive Learning Environments*, *Journal of Computer Assisted Learning*, and *Higher Education*. Dr. Dai has led and co-led thirteen nationally and internationally funded projects related to human-GenAI collaboration in research inquiry, technology sustainability in educational settings, and teacher agency in the GenAI era. She currently serves as Associate Editor for the *Australasian Journal of Educational Technology* and the *Journal of University Teaching and Learning Practice*.

## Speaker



*Professor*  
**LIU Ang**

Professor of Engineering Design,  
School of Mechanical and Manufacturing Engineering  
University of New South Wales

## Designing with AI, Learning as Designers: Challenges and Future Directions for Engineering Design Education

### Abstract

Generative AI is already changing how students search, write, code, analyse, and make design decisions. For engineering design education, this raises a difficult question: if AI can help students generate ideas, compare alternatives, and produce convincing design outputs, what exactly should students still learn, practise, and be assessed on? This presentation examines this question within engineering design education. Design learning is not only about producing a final solution. It also involves problem framing, exploration, trade-off analysis, judgement, reflection, and responsibility. As AI systems become more capable, from information support to reasoning, workflow facilitation, collaboration, and agentic action, educators need to rethink how student capability should develop alongside AI capability. The presentation discusses key challenges and future research opportunities, including engineering-aware representation of design knowledge, context engineering, AI-era design skill development, and design memory. central concern is how students can design with AI while still learning as designers.

### Biography

Prof. Ang Liu is Professor of Engineering Design at the University of New South Wales, Australia. His work sits at the intersection of engineering design, AI-driven design, smart manufacturing, digital twins, and engineering education. He has taught design thinking and engineering design to more than 10,000 engineering students and industry practitioners, and has contributed to the development of design education through curriculum innovation, project-based learning, and international collaboration. His educational contributions have been recognised by the UNSW Vice-Chancellor's Award for Outstanding Contributions to Student Learning and the Australian Awards for University Teaching Citation for Outstanding Contributions to Student Learning. He is a Senior Fellow of the Higher Education Academy, Fellow of ASME, Fellow of Engineers Australia, Fellow of the PLuS Alliance, JSPS Invitational Fellow, and Associate Member of CIRP. He currently serves as Vice Chair of CIRP STC Design and contributes actively to international engineering design education and research communities.

# AI4HE Symposium (3)

## AI for Tertiary and Vocational Education : Innovation, Assessment, and Sustainability

### Chair and Speaker



*Professor*  
**XU Guandong**

Chair Professor of Artificial Intelligence  
Assistant Vice President (Artificial Intelligence and Education Innovation)  
Director, University Research Facility of Data Science and Artificial Intelligence  
The Education University of Hong Kong

### Higher Education in the AI Era: Challenges, Opportunities & A Path Forward

#### Abstract

As generative AI reshapes knowledge creation and problem-solving, higher education stands at a critical crossroads. This talk examines how AI is challenging traditional models of teaching, assessment, and curriculum design. While concerns around academic integrity, skill obsolescence, and digital divides are real, AI also offers unprecedented opportunities for personalised learning, enhanced research capabilities, and administrative efficiency. Drawing on emerging practices from global universities, I will propose a balanced action plan—focused on AI literacy, assessment reform, faculty development, and ethical frameworks. The goal is not to resist AI but to redesign education around uniquely human strengths: critical thinking, creativity, empathy, and judgment. Moving forward, institutions must shift from knowledge transmission to cultivating adaptable, AI-augmented graduates. The talk concludes with concrete first steps for educators and leaders ready to lead this transformation responsibly.

#### Biography

Professor Guandong Xu is Assistant Vice President (Artificial Intelligence and Education Innovation) and Chair Professor of Artificial Intelligence at The Education University of Hong Kong. He also serves as Director of the University Research Facility of Data Science and Artificial Intelligence and was previously Director of the Centre for Learning, Teaching and Technology.

Professor Xu previously held a Full Professorship at the University of Technology Sydney. He has published over 360 papers in leading international journals and conferences, and has been consistently ranked since 2021 in the Stanford University list of the world's top 2% most-cited scientists in Artificial Intelligence.

Professor Xu is the founding Editor-in-Chief of Human-centric Intelligent Systems (Springer) and Assistant Editor-in-Chief of the World Wide Web Journal (Springer). He was elected Fellow of the Institution of Engineering and Technology (IET) in 2022 and Fellow of the Australian Computer Society (ACS) in 2021.

## Speaker



*Professor*  
**JIANG Bo**

Professor, School of Computer Science  
East China Normal University

## Assessing Vocational Skills via LLM Agents

### Abstract

Since 2000, the OECD has assessed global education systems via PISA (Programme for International Student Assessment), which evaluates 15-year-old students' proficiency in reading, mathematics and science. In 2022, the OECD launched explorations into evaluating initial vocational education and training (VET) systems, targeting learners aged 16 to 25 across five occupational fields. Unlike foundational competencies such as literacy and numeracy, vocational skills are far more complex, requiring substantial time investment and heavy reliance on professional expertise. The emergence of large language models (LLMs) offers a promising new approach to automated vocational skill assessment. Nevertheless, formidable challenges still remain, mainly stemming from the uncertainty and hallucinations of LLMs, as well as the scarcity of relevant datasets. In this presentation, I will share my latest research exploring the feasibility of deploying AI agents for vocational skill assessment.

### Biography

Dr. Bo Jiang is currently a professor at the Shanghai Institute of Artificial Intelligence for Education, East China Normal University, Shanghai, China. His research interests focus on educational large models, learner modeling, and K-12 AI education. His research findings have been published not only in international academic journals in the field of educational technology including ETRD, ILT, ET&S and IEEE TLT, but also in top-tier conferences in artificial intelligence such as AAAI, ICML, CHI and AIED. He is an Executive Committee member of the Asia-Pacific Society on Computers in Education (APSCE) and the editorial board member of several journals, such as IEEE TLT, RPTTEL and IJBIC. He also served as the International Program Committee Chair of ICCE 2025 and GCCCE 2023. In recognition of his academic achievements, he was awarded the APSCE Early Career Research Award in 2021.

## Speaker



*Professor*  
**ZHU Jia**

Professor and Vice Dean, School of Education  
Zhejiang Normal University

## AI-Empowered Pre-Service Teacher Education: Practices and Innovations

### Abstract

Pre-service teacher education has long struggled with insufficient authentic classroom practice, limited behavioral data, inadequate resource evaluation, and fragmented workflows across preparation, instruction, and professional development. This talk introduces an integrated AI-driven solution we have built to tackle these challenges, organized around four dimensions: data, platform, training, and evaluation. We present MM-TBA, a multi-modal dataset of authentic classroom behaviors from over 300 trainee teachers; ShiDao, a unified platform connecting lesson preparation, classroom instruction, and teaching research in a seamless data pipeline; an AI student agent system enabling high-fidelity rehearsal practice without live students; and PRISM, a platform that evaluates teaching materials across 24 fine-grained indicators through interactive human-AI dialogue. Together, these initiatives outline a new human-AI collaborative paradigm for pre-service teacher education.

### Biography

Prof. Jia Zhu is a Distinguished Professor and doctoral supervisor at Zhejiang Normal University (ZJNU), where he serves as Vice Dean for Research at the College of Education. He also directs the Zhejiang Provincial Key Laboratory of Intelligent Educational Technology and Applications and heads the Intelligent Education Research Center of the Zhejiang Provincial Laboratory for Digital Culture, Education, and Social Development. Dr. Zhu has published over 200 papers in top-tier journals and conferences spanning artificial intelligence and intelligent education, and has led or participated in more than 30 national and provincial research projects. He serves as Associate Editor for several SCI journals including IEEE Transactions on Computational Social Systems. His work has earned multiple honors, including the 2024 Zhejiang Provincial Science and Technology Progress Award (First Prize) and recognition as a 2024 Wiley China Outstanding Research and Innovation Scholar. His research has been widely covered by major Chinese media outlets.

## Speaker



*Professor*  
**YUNG Kin Lam Ken**

Chair Professor of Biology and Neuroscience,  
Department of Science and Environmental Studies  
Associate Vice President (Knowledge Transfer and Sustainability)  
The Education University of Hong Kong

## Empowering the Green Future: Leveraging AI to Drive Sustainability and SDGs Across Tertiary and Vocational Education

### Abstract

As higher education institutions navigate the twin transitions of digital transformation and ecological urgency, Artificial Intelligence (AI) emerges as a powerful catalyst for the United Nations Sustainable Development Goals (SDGs). This presentation explores how universities and vocational institutions can strategically integrate AI to cultivate a sustainability-ready workforce and optimize institutional operations. Drawing on emerging paradigms, we examine how AI can be strategically embedded in teaching, research, campus operations, and community engagement to advance Good Health and Well-being (SDG 3), Quality Education (SDG 4), Responsible Consumption (SDG 12), and Climate Action (SDG 13). However, deploying AI for sustainability requires addressing its own environmental footprint and data ethics. Ultimately, this session outlines a comprehensive framework for institutional leaders to harness AI responsibly, transforming higher education into a vanguard of sustainable innovation and societal impact.

### Biography

Prof Ken Yung's research has received numerous prestigious international invention and innovation awards such as Gold Medals in Inventions Geneva. Prof. Yung's team has long been dedicated to cutting-edge interdisciplinary research in neuroscience and translational medicine. Their work focuses on original and systematic studies in areas including the pathogenesis of neurodegenerative diseases, brain health and injury repair, environmental exposure and neurotoxicology, stem cell and regenerative medicine, and applications of intelligent nanomaterials. Characterized by multidisciplinary integration and innovation, the team utilizes advanced approaches such as molecular biology, nano-biomaterial engineering, and 3D organoid construction. These methods drive multidimensional breakthroughs in understanding neurological disease mechanisms, protecting brain health, assessing environmental health risks, and developing novel intervention strategies. Their research spans fundamental discoveries to preclinical to potential clinical applications, making significant contributions to addressing major health challenges. Prof. Yung is ranked among Stanford World's Top 2% Scientists and awarded over 20 international patents.

# 8 AI4K-12 Symposium (1)

## 人工智能時代學校數碼轉型的領導策略

### Chair



#### 鄭國城 博士

數學及資訊科技學系副教授  
教學科技中心總監  
香港教育大學

### Speaker



#### 陳狄安 校長

英華書院

## AI之旅：跨出第一步

### Abstract

因應當前 AI 科技發展熱潮及教育局將其列為必修課程之政策，學校如何有效規劃並推動 AI 教育，已成為關鍵課題。本講座特邀講者分享其實務經驗，旨在以深入淺出的方式普及 AI 認知。內容將從基礎概念切入，探討校方引入與應用 AI 的具體歷程，引導與會者理解 AI 於日常與教育層面的巨大潛能，進而將其轉化為啟發學生思維的重要契機。

本講座核心內容涵蓋兩大面向：首先，解構 AI 基本原理，賦能教師以適切語言向不同學齡學生進行教學；其次，深究 AI 之課堂實務應用，包含引進遊戲化學習、互動平台及基礎程式編碼，藉此奠定學生的創意思維與問題解決能力。期盼藉由循序漸進的推動方式，形塑校園創新文化，引領學生在安全且具啟發性的環境中，積極探索未來科技之可能。

### Biography

陳狄安校長MH 畢業於英國紐卡素大學，獲得會計及金融分析學士學位，及後取得澳洲紐卡素大學商業碩士學位。陳校長於2002年展開其教育工作，兩年後加入東涌一所直資學校工作並於2013年獲委任為校長，其後於2021年起出任英華書院校長。此外，陳校長現時為香港直資學校議會副主席，積極推動直資學校的發展。他在社區服務方面十分活躍，目前是香港校長中心副主席、九龍地域校長聯會副主席、離島區青少年發展及公民教育委員會主席、及香港童軍總會助理香港總監（青少年活動）等公職。

## AI 賦能資優教育：優才書院的校本實踐與學科創新

### Speaker



**陳偉傑** 校長

優才(楊殷有娣)書院小學部

### Abstract

優才（楊殷有娣）書院小學部作為資優教育先行者，將「善用 AI 科技促進學與教」列為核心關注事項。本演講將分享學校如何透過系統化的校本規劃，把 AI 技術轉化為推動學生自主學習、深度思考與創意輸出的核心動力。

學校秉持「AI 回歸教育本質」的核心理念，推動跨學科融合學習：語文科深化情境創作與批判思維，科技教育則培育計算思維與問題解決能力；學校亦同步推 進教師專業成長。學校深信，AI 的引入非取代教師，而是更能突顯教育的本質——燃點學習熱情、深化師生互動，讓學與教充滿人的溫度。實踐的關鍵在於建 立「從理解知識到動手創作」的雙向循環，輔以數據驅動教學鞏固學習弱項，為 資優教育開啟 AI 賦能的新篇章。

### Biography

陳偉傑校長持有工商管理學士、資訊科技教育理學碩士及教育博士學位。自 1997 年投身教育事業，深耕教育近三十載，歷任中小學及專科學院教學及行政要職， 具備全面的國際教育視野與跨階段領導經驗，並於 2021 年出任優才(楊殷有娣)書院小學部校長。陳校長秉持「植根香港、胸懷家國、面向世界」的教育理念，引領學 生成為具全球競爭力的未來領袖。陳校長視 STEAM 與 AI 教育為推動課程深層變革的核心。在其領導下，學校創科教育屢獲殊榮：連續四年蟬聯「香港科學青苗獎」冠亞軍；學生在開放數據應用、Geo-STEAM 2025 及未來城市規劃設計等賽事中屢獲冠軍及創意大獎。學校 榮膺「十佳 STEAM 學校」及「香港傑出 STEAM 教育學校」，陳校長更獲頒「STEAM 教育校長領導大獎」，創新教育領導力備受業界肯定。

## 迎接 Agent 元年：小學 AI 教育的校本實踐與未來展望

### Speaker



**朱偉林** 校長

鳳溪第一小學

### Abstract

講者將剖析香港小學推行人工智能教育的策略、政策背景及校本實踐，並前瞻未來發展。內容分四部分：國際視野介紹AI4K-12五大核心概念，以及2025「Agent元年」與具身智能機械人的影響。香港脈絡梳理《數字教育發展藍圖》、五億港元「智啟學教」計劃、教師培訓及課程編制等課題。校本實踐以「AI in/for/to Education」框架，說明資訊科技與科創雙軌課程，並分享自2017年參與賽馬會CoolThink計劃的歷程。前瞻未來探討 Prompt Engineering教學、具身智能機械人課程，以及教師轉型為學習教練的趨勢。講者亦結合國家十五五規劃，點出香港「超級聯絡人」角色，並提出三項建議：「開始做，毋須完美」、「老師先行」、「善用資源」，供業界參考。

### Biography

朱偉林校長，1991年畢業於柏立基教育學院後，任教鳳溪第一中學及小學，2015年接任鳳溪第一小學校長。在校任教期間取得教育學士及碩士學位。近年推動教師專業發展，帶領學校邁向「學習型組織、學術型機構」願景，建構「四習一核心」框架（電科學習、教學研習、多元學習、自主學習及價值觀教育），培育自主學習者。社會服務包括北區區議員、深圳市鹽田區政協委員、中華海外聯誼會理事、教聯會理事、新界校長會主席、香港教育行政學會主席及北區小學校長會主席等。曾獲行政長官社區服務獎狀、民政及青年事務局嘉許狀、行政長官卓越教學獎、水務署傑出領袖獎、卓越教育行政人員獎及香港傑出教師等多項殊榮。

## 從工具應用走向學習轉化與全校協同

### Speaker



**金偉明** 校長

香港聖公會何明華會督中學

### Abstract

生成式人工智能正為中小學教育帶來深遠影響，但學校如何由個別教師試用 AI，逐步發展至有策略及可持續的全校推行，仍是校長與教師共同面對的重要課題。這次分享將以「由試點到全校推行」為主軸，探討中小學推動 AI 教育的策略路徑、校本管理與實踐方法。內容將涵蓋學校如何訂立 AI 教育願景、建立負責任的 AI 使用守則、支援教師專業發展、促進跨科協作、培養學生 AI 素養，以及處理私隱、安全等問題。分享將強調，AI 教育不應只停留於工具示範或個別試驗，而應與學生學習、教師效能、課程發展及學校整體規劃相結合。透過具系統的推行框架，學校可由「工具導向」走向「學習導向」，由「個別創新」走向「全校協同」，逐步建立安全、有效及具教育意義的 AI 校園生態。

### Biography

金偉明先生現為香港聖公會何明華會督中學校長、香港電腦教育學會榮譽主席，是資深的教育工作者及STEAM領航者，積極推動本港及內地STEAM教育、課程發展及數字教育等工作。他參與多個社會機構及政府部門委員會，包括擔任教育局課程發展議會科技教育委員會主席、電子學習聯盟執行委員、職業訓練局創新及科技訓練委員會委員、香港童軍總會資訊及通訊科技委員會委員、香港中文大學學習科學與科技中心顧問、香港教育大學數學與資訊科技學系顧問及百仁基金青年事務顧問等。金先生同時為香港學術及職業資歷評審局專家、觀塘區學校聯會主席、九龍地域校長聯會副主席、香港津貼中學議會委員及香港中文中學聯會委員。

# AI4K-12 Symposium (2)

## Engaging and Accessible AI Education for K-12 with Humanoid Robots

### Chair



*Professor*  
**YEUNG Siu Sze Susanna**

Professor,  
Department of Psychology  
Associate Vice President (Quality Assurance)  
Executive Co-Director, Academy for Educational Development and Innovation  
The Education University of Hong Kong

### Speaker



*Dr*  
**YANG Weipeng**

Associate Professor,  
Department of Early Childhood Education  
The Education University of Hong Kong

## AI4Kids: Using AI to Empower Young Children in Creative and Playful Learning

### Abstract

This talk explores the integration of Artificial Intelligence (AI) education into early childhood settings, framed within the principles of constructionism and computational thinking. While young children increasingly encounter AI through smart devices, they often lack meaningful opportunities to explore these technologies through hands-on, self-initiated interaction. Drawing on research from the Early Childhood Learning Sciences (ECLS) lab at EdUHK, this presentation introduces a culturally responsive, embodied learning approach to AI literacy. Using an “Ocean Protection” project as a case study, we demonstrate how kindergarten children can engage with core AI concepts—such as perception, learning, and societal impact—through tangible activities like training an AI doggy, playing the “AI for Oceans” game, and testing a real-world marine cleanup robot (ClearBot). Finally, we discuss a child-centred framework for responsible AI, emphasizing how educators can prepare young learners for a future shaped by AI while supporting their development and well-being.

### Biography

Dr. Weipeng Yang is an Associate Professor in the Department of Early Childhood Education and Associate Director of the AI, Brain and Child Research Centre at EdUHK. His interdisciplinary research redesigns early learning to support young children’s development in an AI-driven society. Best known for leading research on integrating computer science and robotics into early childhood development and education, his work has been cited by UNESCO, UNICEF, the OECD, the World Bank, and the White House. His research has been translated into practical resources such as the Early Computational Thinking Packs (幼兒運算思維遊戲書) published by United Prime. He has served as Editor-in-Chief of the Journal of Research in Childhood Education and is currently Triage Editor for the British Journal of Educational Technology and Executive Editor for AI, Brain and Child. He is a recipient of the EdUHK President’s Award in Research.

## My Robot Friend: Making AI Education Accessible and Joyful in K-12 Classrooms

### Speaker



*Dr*  
**YUNG Wai Ho Kevin**

Associate Professor and Associate Head (International Engagement),  
Department of Curriculum and Instruction  
The Education University of Hong Kong

### Abstract

This project addresses the persistent challenges of implementing AI education in K-12 classrooms, including curriculum-device disconnection, high technical barriers for teachers and a lack of age-appropriate engaging scenarios. In this regard, our team developed a Humix AI Control Platform designed for education scenarios in humanoid robots. Users drag and drop blocks to build AI logic, dialogues and interactive flows with no coding required. It features a clean interface, high stability and easy deployment, greatly lowering barriers to AI application development. Our team collected classroom data at a primary school in Shandong, using our humanoid robot “Little Pony” as the core learning companion. Equipped with object recognition, facial recognition, bilingual AI dialogue and voice interaction, “Little Pony” supports modular lessons (e.g., sound vibration, visual sensing, face recognition) delivered through graphical drag-and-drop programming. Evaluative feedback from Grades 1-6 shows 98.4% of students gave the course a perfect 10-point rating. Students articulated abstract AI principles accurately, formed strong emotional bonds with the robot and connected concepts to real-life applications. Teachers using the platform also found it easy to control the robot and teach robotic knowledge to students.

### Biography

Dr Kevin Yung is an Associate Professor at the Department of Curriculum and Instruction and Associate Co-Director of Academy for Educational Development and Innovation at The Education University of Hong Kong. He has published widely in international journals such as *Modern Language Journal*, *TESOL Quarterly*, *System*, *Journal of Multilingual and Multicultural Development* and *Language Teaching Research*. He is currently the Senior Editor of the Language Education section of *Cogent Education* (Taylor & Francis) and an Associate Editor of *Journal for the Study of Education and Development* (Sage). His research interests include learning motivation, agency, out-of-school self-directed learning and AI-enabled teaching and learning.

Theme: Physical Education & Digital Wellbeing



**Dr CHOW Chi  
Ching Gary**

Associate Professor,  
Department of Health and  
Physical Education  
The Education University of  
Hong Kong

## Smart PE: Driving Innovation in K-12 Physical Education with AI

### Abstract

Rapid technological advancements are redefining sports in both professional fields and schools, prompting K-12 physical education (PE) to evolve beyond traditional boundaries. This presentation explores how integrating Artificial Intelligence (AI) and digital innovations can drive pedagogical transformation and enhance student learning outcomes. Grounded in the Technological Pedagogical Content Knowledge (TPACK) framework, we address current frontline teacher needs and the practical integration of accessible, data-driven sports technology. Attendees will discover real-world applications utilized in teacher training and school settings, ranging from computer vision for real-time motion tracking and stroke analysis to AI-assisted speech evaluations for lesson refinement. Ultimately, this session provides school principals and teachers with concrete strategies to cultivate technological literacy, foster multidisciplinary STEM concepts, and build data-informed, innovative learning environments that equip K-12 students for a dynamic future.

### Biography

Dr. Chow Chi-Ching Gary is an Associate Professor of Health and Physical Education (HPE) at The Education University of Hong Kong (EdUHK). As a leading educator and Chair of Learning and Teaching, he influences physical education pedagogy, curriculum development, and regional policy. His interdisciplinary research, supported by Research Grant Committee grants, combines postural control, motor learning, and tech-driven PE, with a specific focus on integrating AI into assessment currently. This innovative approach has earned him widespread recognition within the frontline PE and sports communities, as well as a seat on the Chief Executive's Award for Teaching Excellence (CEATE) assessment panels. Dr. Chow is deeply committed to mentoring early-career educators and fostering cross-sector collaboration to enhance teaching effectiveness. Guided by an educational philosophy centered on active engagement and holistic development, he actively bridges the gap between theory and practice to advance sports education and promote lifelong physical activity.



**Dr TONG Xiuhong**

Associate Professor,  
Department of Psychology  
The Education University of  
Hong Kong

## Large-Scale Evidence on AI Adoption in Language Education: The Role of Teacher Attitudes and Context

### Abstract

The integration of artificial intelligence (AI) into language education is rapidly reshaping instructional practice. We investigated how English teachers' attitudes toward AI relate to their reported use frequency and future adoption intentions, and whether these associations vary across professional contexts. Survey data were collected from 2,548 K-12 English teachers in China, assessing attitudes toward AI-assisted learning and teaching, student AI use, and AI replacing teachers, alongside measures of AI practices and demographic characteristics. More favorable attitudes toward AI were consistently associated with greater reported use and stronger adoption intentions. These associations were moderated by contextual factors. Educational stage significantly shaped the link between attitudes toward AI-assisted teaching and use frequency. Educational stage, teaching experience, and school region moderated the relationship between attitudes toward student AI use and intentions to apply AI in student evaluation. Teaching experience and educational stage also moderated intentions to use AI for research purposes. These findings highlight the contextual nature of AI adoption in education and underscore the need for differentiated, context-sensitive AI literacy support for teachers.

### Biography

Dr. Xiuhong Tong is an Associate Professor in the Department of Psychology at EdUHK. She specializes in first language (L1) and second language (L2) learning in normal children and children with dyslexia, as well as the development of literacy in normal children and those with reading difficulties, along with other learning difficulties. She has published more than 60 papers in international journals, with her research supported by 4 grants from the Hong Kong Government Research Council, 1 grant from the National Natural Science Foundation. She has received prestigious awards such as the "Rising Star" award from the Association for Psychological Science (APS), the Early Career Research Excellence Award from The Education University of Hong Kong, and the Early Career Research Excellence Award from the Association for Reading and Writing in Asia.

Theme: **Language Education**



**Dr KOHNKE Lucas**

Senior Lecturer, Department of English Language Education  
Academic Coordinator,  
Centre for Learning, Teaching, and Technology  
The Education University of Hong Kong

## Harnessing AI to Enhance Students' Creativity and Higher-Order Thinking Skills in the English Classroom

### Abstract

The rapid development of artificial intelligence (AI) is reshaping teaching and learning, opening up exciting new possibilities for enriching English Language education. In English language classrooms, AI can enable richer, more challenging, creative, and personalised learning experiences, particularly for gifted and more able students in the regular classroom. This session aims to empower English teachers with pedagogically sound ways to integrate advanced AI tools into lesson design, assessment, and classroom practice to enhance students' creativity and higher-order thinking skills. It will demonstrate how AI, combined with literary works such as short stories, poems, and literary excerpts, can spark creativity and deeper thinking in writing and speaking. Participants will gain the knowledge and skills to design personalised and appropriately challenging learning tasks for both primary and secondary classrooms. The session will offer inspiring, concrete, and practical lesson examples for embedding AI-enhanced strategies into the English curriculum and daily classroom routines.

### Biography

Dr Lucas Kohnke is a Senior Lecturer at The Education University of Hong Kong, specializing in technology-supported teaching and learning, teacher professional development, and the use of emerging technologies, particularly generative AI, in education. He holds a Doctor of Education in TESOL from the University of Exeter. His research focuses on the role of artificial intelligence in language education and teacher development. Before joining academia, he worked in Sweden, China, Thailand, South Korea, the Sultanate of Oman, and Afghanistan as an EAP/ESP teacher, teacher educator, and assessor. He has published more than 100 articles in leading journals, including TESOL Quarterly, ReCALL, System, Computers and Education: Artificial Intelligence and RELC Journal. In 2024 and 2025, Stanford University recognized him among the world's top 2% most-cited scientists.



**Dr LIN Dan**

Associate Professor,  
Department of Psychology  
The Education University of Hong Kong

## AI Storybook Reading Enhancing Reading Skills and Emotional Understanding in Children

### Abstract

This paper investigates the efficacy of distinct instructional strategies in enhancing children's reading skills and emotion understanding within a storybook reading context across two studies. Study 1 examined the effects of metalinguistic training among K3 children. Results revealed that children in the metalinguistic training group performed significantly better in Chinese character reading compared to those in the dialogic reading control group. Shifting focus to socio-emotional development, Study 2 investigated whether an AI reading companion could strengthen children's emotion understanding through dialogic reading that emphasized emotional and mental state talk. Utilizing an AI-powered storybook application, Star Reading, the companion engaged children in dialogue rich in emotional and mental state language during shared reading. Post-intervention results demonstrated that participants achieved significantly greater improvements in emotional comprehension. Taken together, these findings suggest that different training strategies yield distinct cognitive and social developmental outcomes within shared reading environments. Furthermore, the results highlight that AI reading companions may offer innovative, scalable pathways for advancing children's cognitive and social growth alongside traditional educational practices.

### Biography

Dr. Dan LIN is an Associate Professor in the Department of Psychology from the Education University of Hong Kong. She is also the Co-Director for the Institute of Special Needs and Inclusive Education. As a developmental psychologist, her research focuses on children's digital reading, language and learning, and socioemotional development. Most of her work has been published in prestigious journals, such as Psychological Science, Developmental Science, Learning and Instruction. She received the Mid-Career Award by the Association for Reading and Writing in Asia 2022. She serves as an academic Advisor on International Certification of Evidence of Impact in Education.

Theme: Arts Education



**Dr GUO Qiuzi**

Assistant Professor,  
Department of Cultural and  
Creative Arts  
The Education University of  
Hong Kong

## AI, Immersive Media, and Local Culture: Reimagining Creative Learning through Digital Cultural Heritage

### Abstract

As AI and immersive technologies increasingly reshape creative practice and visual culture, art education is entering a new phase of interdisciplinary learning. This talk explores how AI and immersive media can be used to engage students with local culture and cultural heritage through creative practice. Using a digital heritage project focused on a traditional dried seafood shop in Kowloon City, Hong Kong, the session discusses how technologies such as photogrammetry, AI-assisted production, and virtual reality can help reconstruct disappearing urban spaces as interactive learning environments. The talk reflects on how students can learn through observation, storytelling, spatial exploration, and digital creation while developing greater awareness of community history and everyday culture. It also considers how AI and immersive technologies may reshape future art and design education by connecting creativity, technology, and cultural understanding.

### Biography

Qiuzi Guo is an Assistant Professor in the Department of Cultural and Creative Arts at The Education University of Hong Kong. Her research focuses on the history of Chinese photography and visual culture, with broader interests in digital arts, immersive media, and digital cultural heritage. Her recent projects explore how technologies such as AI, photogrammetry, and virtual reality can support creative learning, cultural storytelling, and the preservation of local heritage through interactive digital environments.



**Dr POPOSKI Zoran**

Associate Professor,  
Department of Cultural and  
Creative Arts  
The Education University of  
Hong Kong

## Unlocking Student Creativity with Generative AI

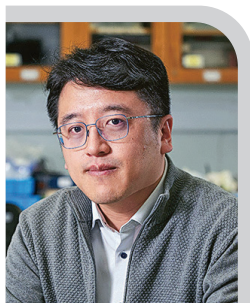
### Abstract

How can artificial intelligence transform, rather than replace, the creative process in our classrooms? Drawing on a recently completed study of AI-driven creativity in art education, this talk explores the practical integration of generative AI tools into K-12 curricula. Research shows that thoughtfully implementing AI significantly boosts students' artistic self-efficacy. In our study, nearly 67% of students felt more encouraged to experiment with new techniques and step outside their comfort zones without fear of failure. For school leaders and teachers, navigating this frontier requires updated pedagogical frameworks and ethical guidelines. This session will share evidence-based strategies, assessment frameworks, and practical teaching packs designed specifically for educators. Discover how AI can serve as a collaborative partner, bridging traditional art practices with innovative technology to foster a more confident, adaptable, and vibrant generation of young creators.

### Biography

Dr Zoran Poposki (FRSA, FRAS) is a pioneering transdisciplinary artist, curator, and scholar working at the intersection of digital visual culture, practice-based research, and arts leadership. His globally recognized practice spans over 130 exhibitions in major cities worldwide and features innovative public art interventions on urban media platforms. An award-winning researcher and educator, Dr Poposki is a recipient of the General Research Fund (GRF) and the EdUHK President's Award for Outstanding Performance in Research. His scholarly and pedagogical focus encompasses creative artificial intelligence, NFT art, digital culture, and public art, exploring how emerging technologies reshape artistic production and cultural management. Dedicated to transformative arts education, he empowers the next generation of cultural practitioners to navigate the digitized global art landscape through critical thinking, technological fluency, and radical experimentation. Dr. Poposki is Associate Professor and Associate Head (Visual Art) of the Department of Cultural and Creative Arts at The Education University of Hong Kong.

Theme: **Science Education**



**Dr CHOI Tat Shing**

Lecturer,

Department of Science and Environmental Studies

The Education University of Hong Kong

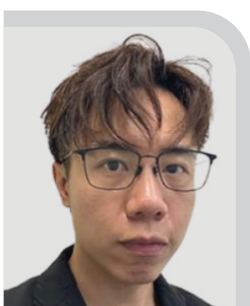
## Scaffolding with Generative AI in Science Classes

### Abstract

The rapid advancement of generative AI is creating new opportunities while also posing fresh challenges for teaching and learning science. When content knowledge is easily accessible through a single query, learning objectives shift from knowledge acquisition to higher-level learning, such as applying scientific ideas to real-world problems, explaining phenomena, and making evidence-based decisions. This change, however, requires additional classroom scaffolding to support students' reasoning and inquiry. In this talk, we will illustrate, with practical examples, how generative AI tools can be used in science education. Participants will engage in interactive demonstrations to explore how teachers can design appropriate learning tasks. The talk will close by considering the evolving role of teachers in this digital era.

### Biography

Dr. Choi Tat Shing Paul is a lecturer at The Education University of Hong Kong. He specializes in science education for primary and secondary teachers. He received his doctoral degree in Physics from the Hong Kong University of Science and Technology, where his research focused on traffic and forecasting. In recent years, Dr. Choi has dedicated his work to science education. He has conducted training workshops and professional development programmes for over 200 in-service primary school teachers, supporting them in transitioning from General Studies to Primary Science. Dr. Choi is also interested in exploring everyday phenomena through modelling and computer simulations. With this broad interest, he teaches courses across a range of topics, including physics, STEAM education, digital education, game design, and ocean literacy.



**Dr LI Tin Lok Matthew**

Senior Lecturer

Department of Science and Environmental Studies

The Education University of Hong Kong

## Shifting the Equilibrium: Using AI to Solve the Long-Standing Compromises in Science Education

### Abstract

For decades, science education has been defined by forced compromises. Bounded by limited classroom time and resources, educators have historically accepted trade-offs between covering complex syllabus content and providing deep, individualized feedback. We settled for mass-instruction workarounds, treating these systemic bottlenecks as unsolvable. This presentation challenges that paradigm. Rather than merely adopting Artificial Intelligence as a novel generative tool, we must view AI as the definitive catalyst that ends the era of educational compromises. By examining historical analogies where technology shattered long-standing constraints, this session explores how AI-blended pedagogy allows us to reclaim our highest educational standards. Focusing on practical applications in science, we will demonstrate how real-time, multimodal AI integration finally solves the "impossible" problems—such as instant error-diagnosis in complex scientific equations—empowering educators to deliver uncompromised, high-fidelity learning experiences to every student.

### Biography

Dr. Matthew Li (BSc, PhD, HKU) is now a Senior Lecturer in SES, EdUHK, specializing in Chemistry, STEAM, and AI Education, as well as an EdTech entrepreneur. He received his BSc and PhD training at the University of Hong Kong (HKU). With a dual research background in Science Education and AI Education, Dr. Li is dedicated to solving long-standing pedagogical challenges by combining innovative scientific research with forward-thinking instructional design. Pushing the boundaries of how technology can transform the classroom, Dr. Li recently founded AIICE Technology Limited, an educational technology startup focused on integrating advanced AI platform for primary and secondary science education to fundamentally improve teaching and learning experiences.

# AI4K-12 Concurrent Sessions (2)

Theme: Special Educational Needs



## Dr FU Hong

Associate Professor,  
Department of Mathematics  
and Information Technology  
Associate Director,  
Centre for Learning, Teaching,  
and Technology,  
The Education University of  
Hong Kong

## How Can AI and Multimodal Sensing Help with SEN? Our Research and Practice

### Abstract

Children with special educational needs (SEN) often face challenges in handwriting and classroom behavior that are difficult to assess objectively using traditional methods. This sharing introduces two AI-powered systems developed to support SEN students in school settings. The Smart Writing Platform combines eye-tracking, pressure-sensitive tablets, and depth cameras to capture how children write – not just what they write. By analyzing gaze patterns, pen dynamics, and posture through multimodal AI, the platform identifies specific areas where a child struggles, enabling teachers to provide targeted support. The AI-enabled Smart Vest addresses classroom behavior for children with ADHD. Worn comfortably during lessons, the vest uses motion sensors and real-time AI to detect hyperactive movements and delivers gentle vibration reminders that help children refocus. This research and practice illustrate how AI and multimodal sensing can be made practical and child-friendly, offering educators and parents actionable insights to better support children with SEN in K-12 Education.

### Biography

Dr Fu Hong is currently an Associate Professor in the Department of Mathematics and Information Technology at The Education University of Hong Kong. She also serves as the Associate Director of LTTC and as a Co-Director of the Institute of Special Needs and Inclusive Education. Her research focuses on artificial intelligence and computer vision with applications in education, healthcare, and assistive technology. She has secured over HK\$17 million in competitive external funding as Principal Investigator and led multiple applied research and innovation projects. Her work has received internationally recognized invention awards and has been successfully licensed to industry. Dr Fu has extensive experience in managing externally funded projects and translating research outcomes into practical educational impact.

## AI-empowered Systems with Interactive Robots for Educational Applications

### Abstract

My research advances educational access for students with special education needs (SEN) by designing AI-empowered systems integrated with interactive robots, grounded in self-determination theory (SDT) to enhance engagement, motivation, and learning experiences. Our team has conducted knowledge transfer that bridges research into community service through service learning initiatives, providing direct support to local schools. For students in Tai Po, we are developing AI-empowered robots that combine STEM learning with a positive thinking system. Leveraging generative AI, these robots create personalized and adaptive learning experiences that foster inference and help students recognize and build upon their innate strengths. The system promotes technological literacy, emotional health, well-being, and positive thinking, ensuring that each student's unique needs and learning styles are supported. With support from ISNIE, this holistic approach not only improves academic outcomes but also nurtures resilience and self-determination, empowering students to thrive both inside and outside the classroom.

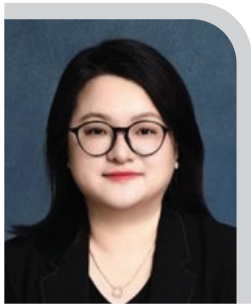
### Biography

Fung Ka Yan, Gabby, is a Postdoctoral Fellow of Institute of Special Needs and Inclusive Education (ISNIE) at the Education University of Hong Kong (EdUHK), specializing in AI in Education, Human-Computer Interaction (HCI), Human-Robot Interaction (HRI), Generative AI, Special Education, Inclusive Education and Well-being. She earned her PhD from the Hong Kong University of Science and Technology (HKUST), where her research focused on human-centred approaches to technology-enhanced learning for students with special learning disabilities. She has published in leading journals and conferences, including IEEE Transactions on Learning Technologies, Education and Information Technologies, and the CHI Conference on Human Factors in Computing Systems. Gabby received the Best Research Award in the Academy of Interdisciplinary Studies (#1 in 100 PhDs).



## Dr FUNG Ka Yan Gabby

Post-doctoral Fellow,  
Institute of Special Needs and  
Inclusive Education  
The Education University of  
Hong Kong



**Dr SUN Daner**

Associate Professor and Associate Head,  
Department of Mathematics and Information Technology  
The Education University of Hong Kong

## From Adaptive Scaffolds to AI Agents: Supporting Math Learning Difficulties in ScaffoldiaMyMaths

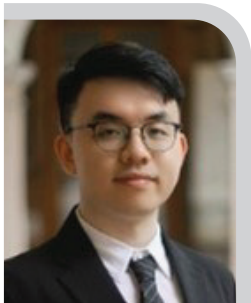
### Abstract

Students with mathematics learning difficulties often require sustained, individualized support that traditional adaptive systems struggle to provide. This report presents an agent-based approach implemented on the ScaffoldiaMyMaths platform, integrating AI Agents and Scaffolding Agents to assist struggling learners. While adaptive scaffolding adjusts task difficulty and hint levels in real time, AI scaffolding, powered by conversational and diagnostic agents, offer step-by-step guidance, error analysis, and motivational feedback. The Scaffolding Agent monitors each student's zone of proximal development, deciding when to introduce, fade, or restore support. Early observations suggest that shifting from adaptive scaffolds to AI agents enhances problem-solving persistence and procedural fluency. This work highlights how intelligent agent collaboration on ScaffoldiaMyMaths can transform support for students with math difficulties.

### Biography

Dr. Sun Daner is an Associate Professor and Associate Head in the Department of Mathematics and Information Technology at The Education University of Hong Kong (EdUHK). She is the Associate Co-Director of the Global Institute for Emerging Technologies (GIET), EdUHK. Dr. Sun's research focuses on AI in education, emerging technologies in education, mobile learning, science education, technology-enhanced STEM education, and higher-order thinking in interdisciplinary contexts.

## Theme: Assessment



**Dr BA Shen**

Assistant Professor,  
Department of Curriculum and Instruction  
The Education University of Hong Kong

## Adaptive Pedagogical Reasoning in the GenAI Era: Renewing Teachers' Core Professional Capacity

### Abstract

As GenAI becomes able to draft feedback, assessment items, summaries of student work, and instructional responses, K-12 teachers' professional value lies less in producing teaching artifacts and more in judging whether AI-shaped outputs genuinely serve learning. This talk introduces Adaptive Pedagogical Reasoning (APR), a conceptual framework that explains teachers' capacity to connect educational purpose, learner evidence, pedagogical action, agency, and professional learning under conditions of uncertainty and change. Focusing on AI for K-12 assessment, the sharing will illustrate how teachers can inspect AI-mediated feedback and assessment episodes through four lenses: pedagogical delegation, epistemic and pedagogical warranting, agency calibration, and professional understanding reconstruction.

### Biography

Dr. Ba Shen is an Assistant Professor in the Department of Curriculum and Instruction at The Education University of Hong Kong (EdUHK), and Associate Programme Leader of the MSc in Learning Sciences and Smart Education. His work sits at the forefront of educational technology and the learning sciences, with a particular focus on learning analytics, inquiry-based learning, and AI-empowered education. He has led and contributed to competitive research projects funded by major agencies, including the Hong Kong Research Grants Council and the National Natural Science Foundation of China. Before joining EdUHK, he held research and teaching positions at The University of Hong Kong and was a visiting scholar at The Ohio State University. He serves on the editorial boards of leading international journals, including British Journal of Educational Technology and Computers & Education, and is a board member of the International Chinese Association for Educational Technology.



### Dr HUANG Lingyun

Assistant Professor,  
Department of Curriculum and  
Instruction

The Education University  
of Hong Kong

## Beyond Automation: Navigating the Promises and Perils of AI in K-12 Education through a Learning Sciences Lens

### Abstract

Generative artificial intelligence (GenAI) presents transformative opportunities for K-12 education while raising fundamental questions about student development and learning. This presentation explores GenAI's dual nature in education, examining its potential to personalize learning experiences, provide immediate feedback, and reduce educator workload through automated assessment and adaptive learning contexts. However, these advances come with critical challenges that demand careful consideration. We examine how GenAI integration affects students' cognitive and metacognitive skill development, particularly concerning over-reliance on AI tools and the potential erosion of critical thinking and problem-solving abilities. The presentation also addresses emotional dimensions, including student anxiety around AI-monitored performance, questions of trust in automated feedback, and the changing nature of student-teacher relationships. Finally, we explore epistemological implications: how AI shapes students' understanding of knowledge construction, authority, and what constitutes valid learning. Drawing on learning sciences research, this presentation offers a balanced perspective to help K-12 educators and administrators navigate GenAI integration in K-12 education practices while preserving the essential human dimensions of education.

### Biography

I am an Assistant Professor at the Education University of Hong Kong. My research explores the potential of emerging technologies in education, including, but not limited to, designing intelligent, technology-rich learning environments and assessing their effectiveness for teaching and learning. I adopt learning sciences theories and methodologies to examine learners' cognitive, metacognitive, behavioral, and affective patterns embedded in learning trajectories. My research has implications for improving the design of technology-rich learning environments, making them more intelligent, adaptive, and ergonomic for teachers and learners across disciplines, thereby increasing their productivity and performance.



### Dr ZHU Jinxin

Assistant Professor,  
Department of Curriculum and  
Instruction

The Education University of  
Hong Kong

## AI時代下自主學習為導向的評估

### Abstract

講者會以現代評估理論為基礎，結合 Rasch 測量模型與 AI 工具應用，聚焦中小學「自主學習導向評估」落地方法。藉由 ShinyTAM 平台自動比對學生能力與題目難度，快速標註學生與班級層面的作答異常題目，大幅減輕教師統計負擔、輸出詳細回饋資料。而 AI 可扮演指導者、同儕、共創者、中立工具四種角色，協助自我評估與同儕互評，培養學生評估素養。教師依托數據實施分層補救教學，跳脫分數導向，重視培養學生自主思考與終身學習能力。

### Biography

朱金鑫，哲學博士（教育心理測量），香港教育大學課程與教學學系助理教授。曾任香港浸會大學教育研究系研究助理教授、香港考試及評核局評核科技及研究部經理，具備中學數學前線教學經驗，深耕教育評核、數碼評估與教學實務多年。主要研究範疇：數碼化評價與學習、評估素養、回饋素養、教育數據分析。其自主研發之教育數據分析平台「ShinyTAM」，於教育界廣獲應用及認可。

Theme: **Mathematics Education**

*Dr*  
**CHENG Kwok Shing Gary**

Associate Professor,  
Department of Mathematics and  
Information Technology  
Director, Centre for Learning,  
Teaching and Technology  
The Education University of  
Hong Kong

## The Teacher Designs, the AI Guides, the Student Solves: A Transparent Tutoring System for Primary Fraction Learning

### Abstract

What is the right relationship between a primary school student and an AI tutor? Not partnership – the AI is not the student's equal. Not authority – the AI withholds the answer. The AI takes a different role: a patient tutor that asks, illustrates, and hints, but never solves. Every question it asks and every diagram it shows is authored by the teacher; the AI carries out a tutoring script the teacher has designed. This seminar introduces a primary mathematics tutoring app focused on fractions. The AI guides each student through one carefully sequenced question at a time, supported by dynamic diagrams that make abstract ideas visible. Every student-AI interaction is captured in an analytics report that highlights high-error topics and identifies students who need extra support. The seminar closes with practical guidance for classroom teachers and school leaders on integrating teacher-led AI tutoring into everyday teaching.

### Biography

Dr Gary Cheng is Director of the Centre for Learning, Teaching and Technology (LTTC), Associate Co-Director of the Global Institute for Emerging Technologies (GIET), and Associate Professor in the Department of Mathematics and Information Technology at The Education University of Hong Kong (EdUHK). Recognised as one of Stanford University's World's Top 2% Most-cited Scientists in 2022, 2023, and 2024, his research focuses on artificial intelligence in education, learning analytics, technology-enhanced language learning, and computer programming education. He has published over 170 research outputs in leading journals, including *Computers & Education*, *The Internet and Higher Education*, and *Interactive Learning Environments*, and has received international invention awards in Canada and the United States. Dr Cheng serves as Associate Editor of the *Australasian Journal of Educational Technology*, *Computers & Education: X Reality*, and *Artificial Intelligence in Language Education*.



*Dr* **LO Chung Kwan**

Associate Professor,  
Department of Mathematics and  
Information Technology  
The Education University of  
Hong Kong

## Using Generative AI to Embed Values Education in Mathematics Teaching

### Abstract

This presentation first reviews the strengths and limitations of generative AI in mathematics education. Building on current curriculum emphases, we illustrate how generative AI can be used to embed values education meaningfully by designing mathematical problems that foreground values such as responsibility and national identity. We will share easy-to-use techniques for customising AI tools and their output evaluation. Examples will highlight how AI-generated problems and solutions can be adapted to surface values-related discussions while maintaining mathematical rigour. The presentation will be grounded in two practice-based accounts, as one secondary school teacher (Mr. YEUNG Lau Ching) and one primary school teacher (Ms. YEUNG Wing Ying) will share their experience in synchronous online lessons and post-exam activities, respectively. Recommendations for school and teacher practices will be discussed.

### Biography

Chung Kwan Lo is an Associate Professor at The Education University of Hong Kong. His primary research interests cover technology-enhanced learning (e.g. flipped learning and AI in education) and mathematics education. He has published in various journals (e.g., *Computers & Education*, *Smart Learning Environments*, and *Journal of Computer Assisted Learning*). He has been recognised by Stanford University as one of the World's Top 2% Most-cited Scientists since 2022.



**Dr SINGH Manpreet**

Lecturer,  
Department of Mathematics and  
Information Technology  
The Education University of  
Hong Kong

## **Math City: A Virtual City for Real Knowledge (Human-AI Interaction in Virtual World)**

### **Abstract**

In today's technology-driven world, mathematics is crucial for developing essential skills, particularly in STEM education. However, many students find abstract concepts challenging due to conventional teaching methods. To address this issue, Math City, a 3D gamified virtual platform based on the 5E inquiry model, was developed. This platform integrates GenAI tools and authentic assessments to make abstract math topics engaging and interactive. Unlike traditional textbooks, Math City enables students to visualize 3D shapes within an immersive environment, thereby enhancing comprehension and retention. Built using Unity game engine and hosted on the metaverse website spatial.io, Math City seamlessly integrates into online and hybrid learning settings, promoting inquiry-based learning and 21st-century skills, including creativity, critical thinking, collaboration, and communication. The prototype was pilot-tested with around 1,400 users from diverse backgrounds, and the findings were published in the peer-reviewed journal *Computer and Education: Artificial Intelligence* (Singh et al., 2025).

### **Biography**

Dr. Singh is a visionary researcher and academic leader driving transformative change in higher education through emerging technologies such as artificial intelligence (AI), virtual reality (VR), and interactive simulations. As a recipient of the prestigious Education University of Hong Kong President's Award for Teaching (2026), Dr. Singh has demonstrated strong teaching excellence and an innovative teaching philosophy by integrating virtual environments with STEM technologies. As a Programme Leader of a pioneering double-degree undergraduate program in AI, EdTech, and science, he gets students ready with 21st-century skills. The virtual platforms developed by Dr Singh have been shortlisted for the Times Higher Education (THE) Awards Asia 2026 in the Technological and Digital Innovation of the Year category and nominated for TIME Best Inventions 2026 in the Classroom & Teaching Tools category, leading impactful, globally recognized practices aligned with the UN Sustainable Development Goals.

Theme: **Technology Education**



**CHUI Hin Leung  
Mike**

Senior Lecturer,  
Department of Mathematics  
and Information Technology  
The Education University of  
Hong Kong

## Reframing 3D Animation Production: Text Prompts, 2D References, Traditional and GenAI Tools

### Abstract

In this session, the speaker will examine the limitations and challenges of conventional 2D image and 3D animation production, including time-intensive processes and technical barriers often encountered. The session will demonstrate how generative AI tools, such as Microsoft Copilot, free 3D pose-assisted applications, and AI-enabled video generation platforms, can streamline the creative workflow. By using text prompts and 2D reference images, participants will explore more efficient approaches to generating and editing 3D animations. The proposed workflow has been successfully implemented in both primary and secondary school settings, demonstrating its adaptability and potential for replication across diverse STEAM education settings.

### Biography

Mr Mike Chui is a course developer and instructor in ICT in Education and Design and Technology, with extensive experience in curriculum design and teacher education. He is an active practitioner of STEAM education, committed to fostering interdisciplinary learning among students. His work focuses on integrating traditional 2D and 3D design practices with emerging technologies, including motion capture and generative artificial intelligence (GenAI). He is particularly interested in how these technologies can enhance design processes and learning experiences. In addition, he explores the pedagogical applications of emerging technologies in STEAM education, with an emphasis on supporting meaningful, student-centred learning in both school and teacher education contexts.



**Dr NG Tsz Kit Davy**

Assistant Professor,  
Department of Mathematics and  
Information Technology  
The Education University of  
Hong Kong

## Co-developing Meaningful AI Learning Experience for Secondary Students: An AI Literacy Perspective

### Abstract

Artificial intelligence (AI) is increasingly influencing many aspects of our daily lives, making it essential for everyone to develop an understanding of AI. With government's Blueprint for Digital Education and support, schools in Hong Kong will continue to incorporate AI and digital technologies across subject domains and learning contexts. Before AI and digital integration take place, it is crucial to strengthen AI and digital literacy so that teachers and schools are prepared to embrace these technologies and empower student learning. This talk will first review a series of studies conducted by my research team on GenAI literacy, with a particular focus on the use of GenAI in different instructional contexts, such as STEM education and story writing in secondary schools. These findings suggest that students' AI literacy should progress from technical-operational to critical-ethical components across various contexts and learning activities. The research also demonstrates how AI can empower and enhance student learning compared with traditional approaches. Finally, the talk will explore future possibilities through meaningful university-school collaboration that can further enrich students' learning experiences.

### Biography

Dr. Davy Ng is currently an Assistant Professor at the Education University of Hong Kong. He has been an IT Panel Head at a local secondary school in Hong Kong and a Visiting Scholar at the Division of Integrative Systems and Design, Hong Kong University of Science and Technology. He holds PhD Education and Technology from the University of Hong Kong (HKU), MEd Educational Psychology, BSc Computer Science, and Postgraduate qualification in ICT Education from the Chinese University of Hong Kong. His research interests lie in the areas of (Generative) AI literacy, human-AI interaction, metaverse, STEAM education, and technology-enhanced pedagogic innovation. He has been named in the 2024 and 2025 Stanford's List of World's Top 2% Scientists in Education.



**Dr TING Sze Thou  
Fridolin**

Senior Lecturer,  
Department of Mathematics and  
Information Technology  
The Education University of  
Hong Kong

## **From Lonely AI Monologues to Prosocial Collaborative Dialogue - Implementing YoChatGPT! for Enhanced Learning Outcomes in K-12 Classrooms**

### **Abstract**

The rapid adoption of generative AI in education has largely remained an isolating 1:1 experience, limiting its potential for classroom collaboration and collective intelligence. YoChatGPT!, a collaborative AI platform developed at The Education University of Hong Kong, addresses this gap by enabling teachers and students to engage synchronously with multiple large language models in shared multi-user chatrooms and workspaces. Designed specifically for K-12 settings, YoChatGPT! supports innovative pedagogies such as Concept Prompts for personalized inquiry-based learning, AI-mediated group activities, and real-time co-creation of knowledge. This presentation shares practical implementation strategies for K-12 IT and subject classrooms, supported by peer-reviewed evidence demonstrating significant gains in students' critical thinking, problem-solving, written communication, and metacognitive skills. With over 32,600 monthly active users across 130+ countries, multiple international awards (including Silver at QS-Reimagine Education 2025), and ongoing school partnerships in Hong Kong, YoChatGPT! exemplifies scalable human-AI collaboration. Participants will leave with actionable insights and ready-to-use strategies to foster engaging, prosocial AI-enhanced learning environments in their schools.

### **Biography**

Dr. Fridolin Ting is a passionate educator and innovator with over 20 years of experience teaching university-level mathematics in Canada and Hong Kong. Deeply committed to bridging theory and classroom practice, he has made significant contributions to K-12 education as Principal Investigator of a Quality Education Fund (QEF) project that developed active learning pedagogies and mobile applications for secondary school mathematics. The project directly benefited nine Hong Kong secondary schools, 47 teachers, and over 1,800 students. Previously, Dr. Ting led the UGC-funded PALMs project (2016–2019), collaborating with four universities to create 13 active learning pedagogies and tools that enhanced STEM learning outcomes, winning over ten local and international awards. He was a finalist for the UGC Teaching Award (2021) and received the President's Teaching Award at PolyU (2021). Currently, as HKTEA CoP Leader for "Innovation and Future of STEM Education," Dr. Ting is at the forefront of generative AI in education. He developed YoChatGPT!, a collaborative AI platform that transforms solitary AI use into engaging group learning. The platform won the Silver Award in the "Best Use of Generative AI" category at the 2025 QS Reimagine Education Awards.

# 10 Programme at a Glance

## AI4EDU Forum: Innovation, Implementation and Collaboration 人工智能與教育論壇：創新、實施與合作

### Time:

Hong Kong Time (GMT+8)

### Venue:

New Academic Building, The Education University of Hong Kong, Tai Po

Date/Time	17 June 2026 (Wednesday)	18 June 2026 (Thursday)
AM	Registration	
	Demonstration and Poster Booths	<b>AI4HE</b> Symposium (1)
	Break	
	Industry Insights Sharing	<b>AI4HE</b> Symposium (2)
	<b>AI4HE</b> Panel Discussion	Break
Noon	Lunch Break	
PM	Registration	
	Opening Ceremony	<b>AI4K-12</b> Symposium (2)
	Keynote Speech	Break
		<b>AI4K-12</b> Concurrent Session (1): PE & Digital Wellbeing   Languages   Arts   Science
	Break	
	<b>AI4K-12</b> Symposium (1)	<b>AI4K-12</b> Concurrent Session (2): SEN   Assessment   Maths   TE
<b>AI4K-12</b> Panel Discussion	Closing Ceremony	

### Remark:

**AI4K-12:** AI for School Education (From kindergarten, primary school to secondary schools)

**AI4HE:** AI for Higher Education Institutions (From tertiary education to vocational education)

<b>Room 1:</b> Assembly Hall (N-1/F-09)	<b>Room 2:</b> N-1/F-01	<b>Room 3:</b> N-1/F-02	<b>Room 4:</b> N-1/F-04	<b>Room 5:</b> N-1/F-05	<b>Registration Counter:</b> 1/F, New Academic Building
--	----------------------------	----------------------------	----------------------------	----------------------------	--

# 11

# Detailed Programme

## Day 1: 17 June 2026 (Wednesday)

Time / Venue	Programme
09:00-09:30	Registration
09:30-10:15	Demonstration and Poster Booths
10:15-10:30	Break
10:30-11:30 Room 1	<b>Industry Insights Sharing</b> 以人工智能赋能学校: 从认知、课堂到实践应用 Chair: 符欲均博士 Speakers: 陈子晞先生、苏莉莉女士、王硕教授
11:30-12:15 Room 1	<b>AI4HE Panel Discussion</b> <b>Beyond the Black Box: Human Judgement and Learning in the Age of Foundation Models</b> Chair: Professor NERI Ferrante Panellists: Professor FENG Zhenhua Professor ZHANG Gexiang
12:15-13:30	Lunch Break
13:30-14:00	Registration
14:00-14:15 Room 1	Opening Ceremony
14:15-15:15 Room 1	<b>Keynote Speech</b> <b>Bridging Cognition and Computation: A Critical Framework for Hybrid Intelligence in Education</b> <b>By Professor Dirk IFENTHALER</b> Chair: Professor XU Guandong
15:15-15:30	Break
15:30-16:30 Room 1	<b>AI4K-12 Symposium (1)</b> 人工智能時代學校數碼轉型的領導策略 Chair: 鄭國城博士 Speakers: 陳狄安校長、陳偉傑校長、朱偉林校長、金偉明校長
16:30-17:30 Room 1	<b>AI4K-12 Panel Discussion</b> 應用人工智能釋放中小學教師及學生的潛能: 人工智能普及認知及應用人工智能於學科學習 Chair: 江紹祥教授 Panellists: 陳志恆校長、勞佩珊校長、張作芳校長、許翰賢校長、趙炳鏗副校長、鄭家寶校長

## Day 2: 18 June 2026 (Thursday)

Note: All presentations on Day 2 will be delivered in English or Chinese, with real-time AI-powered translation provided so all participants can follow in either language.

備註：第二日的所有演講將以英語或中文進行，大會全程提供即時人工智能翻譯。

Time / Venue	Programme
08:45-09:15	Registration
09:15-10:15 Room 1	<p><b>AI4HE Symposium (1)</b>  <b>Support for Self-Regulated Learning and Creative Thinking in the Generative AI Era</b>            Chair: Professor SONG Yanjie            Speakers: Dr KOHNKE Lucas, Dr LIU Yiqi April, Professor MA Qing Angel, Professor SONG Yanjie</p>
10:15-10:25	Break
10:25-11:25 Room 1	<p><b>AI4HE Symposium (2)</b>  <b>Transformative GenAI in Higher Education: Teacher Competencies, Human-AI Inquiry, and Design Learning</b>            Chair: Professor LIM Cher Ping            Speakers: Dr BA Shen, Dr DAI Haimin, Professor LIU Ang</p>
11:25-11:35	Break
11:35-12:35 Room 1	<p><b>AI4HE Symposium (3)</b>  <b>AI for Tertiary and Vocational Education: Innovation, Assessment, and Sustainability</b>            Chair: Professor XU Guandong            Speakers: Professor XU Guandong, Professor JIANG Bo, Professor ZHU Jia, Professor YUNG Kin Lam Ken</p>
12:35-13:30	Lunch Break
13:30-14:00	Registration
14:00-14:50 Room 1	<p><b>AI4K-12 Symposium (2)</b>  <b>Engaging and Accessible AI Education for K-12 with Humanoid Robots</b>            Chair: Professor YEUNG Siu Sze Susanna            Speakers: Dr YANG Weipeng, Dr YUNG Wai Ho Kevin</p>
14:50-15:05	Break

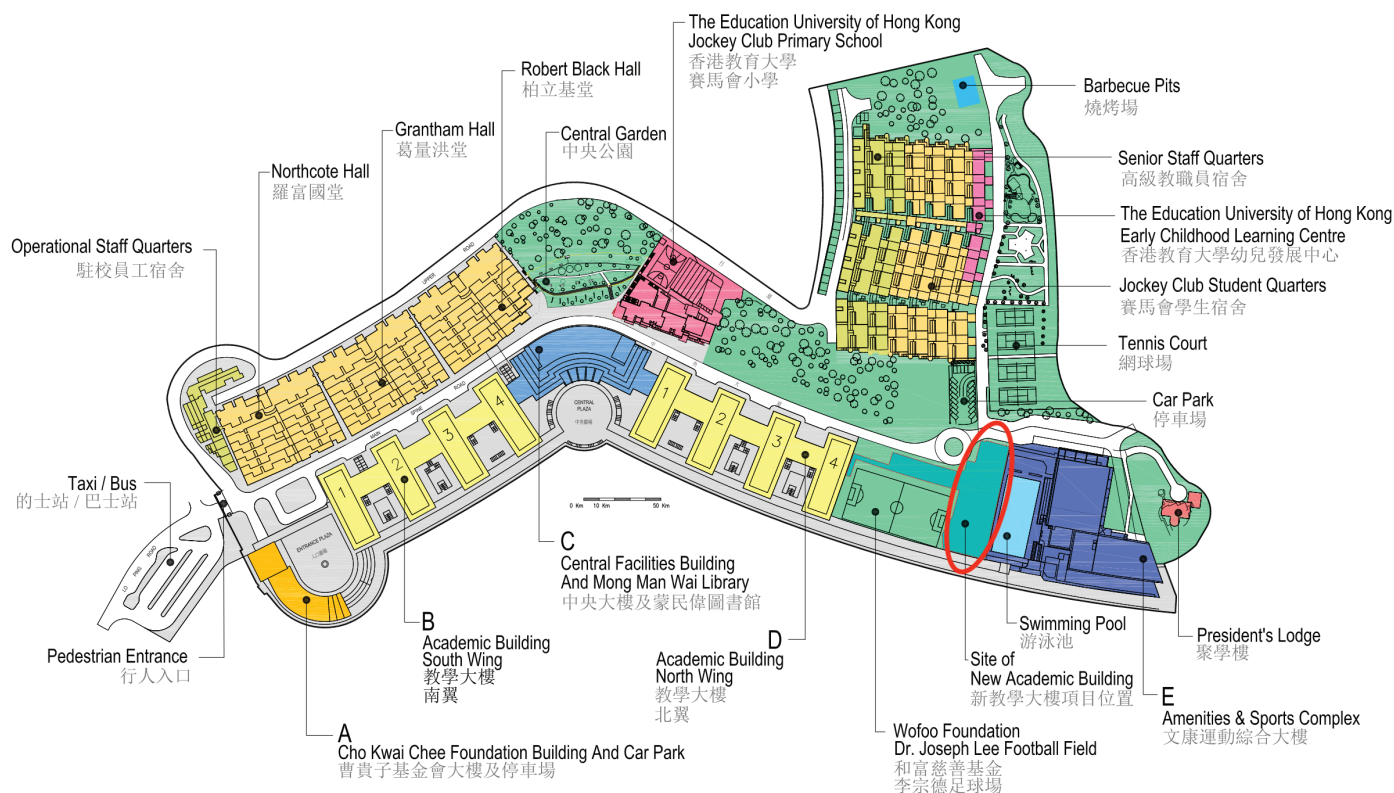
## Detailed Programme

Time / Venue		Programme
15:05-15:55	Room 2	<b>AI4K-12 Concurrent Sessions (1)</b> <b>Theme: Physical Education &amp; Digital Wellbeing</b> Speakers: Dr CHOW Chi Ching Gary, Dr TONG Xiuhong
	Room 3	<b>AI4K-12 Concurrent Sessions (1)</b> <b>Theme: Language Education</b> Speakers: Dr KOHNKE Lucas, Dr LIN Dan
	Room 4	<b>AI4K-12 Concurrent Sessions (1)</b> <b>Theme: Arts Education</b> Speakers: Dr GUO Qiuzi, Dr POPOSKI Zoran
	Room 5	<b>AI4K-12 Concurrent Sessions (1)</b> <b>Theme: Science Education</b> Speakers: Dr CHOI Tat Shing Paul Dr LI Tin Lok Matthew
15:55-16:10		Break
16:10-17:20	Room 2	<b>AI4K-12 Concurrent Sessions (2)</b> <b>Theme: Special Educational Needs</b> Speakers: Dr FU Hong Dr FUNG Ka Yan Gabby Dr SUN Daner
	Room 3	<b>AI4K-12 Concurrent Sessions (2)</b> <b>Theme: Assessment</b> Speakers: Dr BA Shen Dr HUANG Lingyun Dr ZHU Jinxin
	Room 4	<b>AI4K-12 Concurrent Sessions (2)</b> <b>Theme: Mathematics Education</b> Speakers: Dr CHENG Kwok Shing Gary Dr LO Chung Kwan Dr SINGH Manpreet
	Room 5	<b>AI4K-12 Concurrent Sessions (2)</b> <b>Theme: Technology Education</b> Speakers: Mr CHUI Hin Leung Mike Dr NG Tsz Kit Davy Dr TING Sze Thou Fridolin
17:20-17:30 Room 1		Closing Ceremony

## The Education University of Hong Kong

## Tai Po Campus

## 香港教育大學大埔校園



## Venue

New Academic Building, The Education University of Hong Kong,  
10 Lo Ping Road, Tai Po, New Territories, Hong Kong

## Transportation

One-way shuttle bus service will be provided in the afternoon for arrival and departure between EdUHK Tai Po Campus and MTR University Station, on a first-come, first-served basis.

If you prefer public transportation, please visit

<https://www.eduhk.hk/eo/transportation/types-transport/public-transport>



# AI4EDU

FORUM 人工智能與教育論壇

PROGRAMME HANDBOOK



CENTRE FOR  
**LEARNING  
TEACHING AND  
TECHNOLOGY**  
教學科技中心

Website: [www.eduhk.hk/ai4edu2026](http://www.eduhk.hk/ai4edu2026) | Email: [ai4edu2026@eduhk.hk](mailto:ai4edu2026@eduhk.hk)