

AI Education for Every K-12 Learner: Cross-Sector Professional Development Models Under Divergent National Policies

Tim BELL, University of Canterbury, New Zealand

Maya ISRAEL, University of Florida, USA

Weena NAOWAPRATEEP, International Computer Science Education Consortium, Thailand

Allyson KENNEDY, BootUp Professional Development, USA

Yongju JEON, Gyeongbuk National University, South Korea

Abstract

AI arrived in classrooms faster than teacher preparation systems could respond, and faster than most education systems could decide what teachers were permitted to do. AI in K-12 includes two related demands: teaching about AI and teaching with AI tools including generative AI. Professional development (PD) must address both, yet it is designed under conditions that make established guidance hard to apply, because tools change rapidly, policy arrives from national and local authorities at different speeds, and much of what teachers are offered is a single workshop rather than sustained, pedagogically aligned professional learning. This panel addresses three areas: national and local policy across four different governance arrangements; the contextualized problems of practice PD providers face (e.g., data privacy and academic integrity, tool adoption challenges), and research-informed implementation models. Research is the through line. We examine each panelist's approach as evidence rather than describe programs. The panelists and the discussant represent four countries that bring working models examined across shared themes to surface common themes and differences. A minimum of 20 minutes is reserved for structured audience exchange.

Panel Members' Particulars

Role	Name & Affiliation	Email Address	Short Biography (max. 80 words per member)
Chair and Discussant	Tim BELL, University of Canterbury	tim.bell@canterbury.ac.nz	Tim Bell is a Professor in the Department of Computer Science and Software Engineering at the University of Canterbury. He co-created Computer Science Unplugged, which teaches computing concepts without devices. This is widely used internationally, and has been translated into more than 20 languages. Additionally, he has helped design and deploy the teaching of computer science in New Zealand schools.

Panelist	Maya ISRAEL, University of Florida, USA	misrael@ufl.edu	Maya Israel is a Professor of Educational Technology and Computer Science Education at the University of Florida, where she directs the CS Everyone Center. She also heads the Florida K-12 AI Education Task Force, which provides guidance to Florida schools about AI integration into K12. She leads research-funded partnerships on the inclusion of students with disabilities in computing and AI education and examines what teachers need in order to use generative AI with the full range of learners in their classrooms.
Panelist	Weena NAOWAPRATEEP , International Computer Science Education Consortium, Thailand	weena@i-csec.org	Weena Naowaprateep is the Research-Practice Partnership Lead and a board member of the International Computer Science Education Consortium (ICSEC). She works at the intersection of research, policy, and classroom practice in computer science and AI education. Her work focuses on designing and delivering professional development for in-service teachers and adapting international CS and AI resources to align with national curricula and diverse classroom contexts. She also hosted APCSE 2025 in Bangkok, bringing together representatives from ministries, universities, industry, and non-profit organizations across the Asia-Pacific region. Through these roles, she has developed a regional perspective on how teacher professional development models can be adapted and implemented across different educational systems.

Panelist	Allyson KENNEDY, BootUp Professional Development, USA	allyson@bootuppd.org	Allyson Kennedy, Ph.D. is Chief Partnerships Officer at BootUp Professional Development, where she leads strategic partnerships to expand equitable access to elementary computer science and AI education. Previously, she served as a Program Director in the National Science Foundation's Directorate for Computer and Information Science and Engineering, advancing K–20 computing education and workforce initiatives. A 2022 U.S. Embassy Science Fellow in Thailand, Allyson holds a Ph.D. in Integrative Life Sciences and is passionate about building inclusive STEM pathways through policy, partnerships, and global collaboration.
Panelist	Yongju JEON, Gyeongbuk National University, South Korea	yyongju@gknu.ac.kr	Yong Ju Jeon is a Professor in the Department of Computer Education at Gyeongbuk National University. He has actively participated in national education policy research, including South Korea's national curriculum, the establishment of regional AI education ecosystems, and teacher professional development programs related to AI education. His primary research areas include AI literacy, the enhancement of computational thinking, and strengthening K-12 students' digital competencies, with a particular focus on designing artificial intelligence and informatics education models.

Specific Requirements for the Panel (e.g., A/V equipment): This panel will require A/V equipment to display slides, power, and the ability to connect to the WiFi network