

# WS01: 4th International Workshop on Embodied Learning:Technology Design, Analytics & Practices

09:00-10:30	WS01-1
W01-004F	Exploring Cognitive Engagement in Al-driven Adaptive Psychomotor Sport Training Miguel PORTAZ, Rwitajit MAJUMDAR, and Olga C. SANTOS
W01-005F	Exploring Graph Slopes Through a Series of Embodied Learning Experiences Priyadharshni ELANGAIVENDAN, Melwina ALBUQUERQUE, Shizuka DARA, and Sanjay CHANDRASEKHARAN
10:50-12:20	WS01-2
W01-006F	Unpacking interaction Markers of Critical Thinking Aditi KOTHIYAL, Rwitajit MAJUMDAR, Shitanshu MISHRA, Jayakrishnan Madathil WARRIEM, and Prajakt PANDE
W01-007F	Actions and interactions at collaborative engineering design hackathon: Looking through the lens of embodied cognition Soumya NARAYANAN, Navneet KAUR, and Rwitajit MAJUMDAR
W01-008F	Designing an AI-Enhanced Timeline for Monitoring Multimodal Interactions in Embodied Learning Environments Joyce FONTELES, Namrata SRIVASTAVA, Eduardo DAVALOS, Ashwin T S, and Gautam BISWAS



# WS02: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024)

09:00-10:30	WS02-1
W02-003F	Exploring Learning Analytics: A Case Study of Tertiary Educators' Utilization and Integration of AnimoSpace LMS in the Online Learning Environment  Rozanne Tuesday FLORES and Ethel ONG
W02-007F	An Implementation of Augmented Reality in Guided Inquiry-based Learning for Enhancing Primary Students' Mental Models in Science Sasivimol PREMTHAISONG, Pawat CHAIPIDECH, Phattaraporn PONDEE, and Niwat SRISAWASDI
W02-001S	Design and Assessment of a Mobile Cloud Learning Platform for the Classroom: Examining the Efficiency of Blended Learning in Post-COVID Science Education  Joselito Christian Paulus VILLANUEVA, John Lorence VILLAMIN, and Joshua TUMOLVA
10:50-12:20	WS02-2
W02-014F	Exploring Skills Enhancement in Student Teacher through Implementation of Design Thinking in Unplugged Game Creation  Tian Wong LING, Mas Nida Md. KHAMBARI, Mohd Mokhtar MUHAMAD,  Sharifah Intan Sharina Syed-ABDULLAH, and Saiful Hasley RAMLI
W02-017F	Factors influencing ChatGPT use behaviour among trainee teachers Sarala VALAIDUM and Jazihan MAHAT
W02-009S	<b>Design and Implementation of an Educational Escape Rooms Class</b> Jesus Alvaro C. PATO, Gerick Jeremiah Niño N. GO, Paolo Santino P. CAOILE, Gio Gabriel C. REYES Joaquin Enrique B. SINJIAN, Jerold Luther P. AQUINO, and Maria Mercedes T. RODRIGO
13:20-14:50	WS02-3
W02-002S	A Preliminary Investigation of the Definition and Components of Computational Thinking in the Malaysian Education Landscape: From Educational Technology Experts' Perspective Ahmad Sarji Abdul HAMED, Su Luan WONG, Mohd Zariat Abdul RANI, Mas Nida Md KHAMBARI, Nur Aira Abd RAHIM, Fariza KHALID, and Priscilla MOSES
W02-006S	PERS: A Personalized Recommender System for Student-Generated Questions in Programming Courses  Pham-Duc THO
W02-010S	A User Acceptance Testing Tool for Mobile Game-based Learning Application Christian Jade D. GUILLEN and Saturnina F. NISPEROS
W02-016S	Sociotechnical Challenges of Older Educators in Delivering Medical Education Online Ryan EBARDO, John Byron TUAZON, and Miriam Louella FERMIN



# WS02: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024)

15:10-16:10	WS02-4
W02-013S	Minecraft as a Tool for Digital Game-Based Learning: Enhancing Conceptual Understanding and Attitudes in Mathematics Learning Sakda CHALEEPLIAM, Sasivimol PREMTHAISONG, and Pawat CHAIPIDECH
W02-008S	COGNICRAFT: Smart Exam Question Generation with AI And Bloom's Taxonomy Christian SAGADRACA, Zainal SANTOS, Danilo SIMON, Jr., Marianne Jessica TOLENTINO, and Reymar VENTURA
W02-004S	Development and Evaluation of a Hybrid Mobile-Learning App Using Design Science Research (DSR) Framework Joselito Christian Paulus VILLANUEVA, John Lorence VILLAMIN, and Joshua TUMOLVA



# WS03: Analysis and Design of Problems/Questions in the Digital Environment: The 17th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions

Monady, November 25	
09:00-10:30	WS03-1
W03-002	Question Generation Support System Using Others' Research Frames  Daiki MAEDA, Kota KUNORI, and Tomoko KOJIRI
W03-005	Learning Effectiveness and Reflections on Al Literacy in Junior High School Students with Game-Based Learning and Problem-Based Learning Shih-Hua HUANG and Ting-Chia HSU
W03-009	Does Experience of Feedback Generation Promote Student Novel Problem Posing? An Empirical Study in a Database Course  Kazuaki KOJIMA
10:50-12:20	WS03-2
W03-004	Difficulty-Controllable Reading Comprehension Question Generation Considering the Difficulty of Reading Passages  Yuto TOMIKAWA and Masaki UTO
W03-006	Iterative Problem Solving in the Integration of Design Thinking and Game-Based Learning into Enhancing Computational Thinking and Al Literacy  Tai-Ping HSU and Ting-Chia HSU
W03-007	Design and Development of a Stepwise Learning Environment for Problem Posing of Arithmetic Word Problem  Yusuke HAYASHI, Nagito YAMAMOTO, Susumu SHIMAKAWA, and Tsukasa HIRASHIMA



### WS04: The 8th Computer-Supported Personalized and Collaborative Learning

09:00-10:30	WS04-1
W04-003 F	Investigating the Impact of Cooperative Group Learning on Blended Teaching and Learning Outcomes: A Case Study of Sixth-grade Students in an Elementary School De Jun MO and Joni Tzuchen TANG
W04-008 F	Investigating Students' Online Learning Perception through the Lens of Constructivism May Marie P. TALANDRON-FELIPE, Kent Levi A. BONIFACIO, and Gladys S. AYUNAR
W04-001 S	Integrating Virtual Environment in Teaching Courses Chiu-Jung CHEN and Pei-Lin LIU
10:50-12:20	WS04-2
W04-007 F	Investigating the Role of AI Book Talk Companion in Enhancing Student Performance: A Pilot Study on Self-Efficacy Yi-Cheng TSAI, Hsiao-Tung YANG, Chang-Yen LIAO, Yen-Cheng YEH, and Tak-Wai CHAN
W04-013 F	Investigation of skills training system using TF-IDF for the plasterer's skeletal data Ryota TANAKA, Naka GOTODA, Lee SAERON, Ryo KANDA, Ayaka HUNABIKI , Hirotake KANISAWA, Kanae KANDA, Yuka TAKAI, and Toshihiro HAYASHI
W04-002 S	The Trends in Computer-Supported Virtual Reality Collaborative Learning Ching-Yi CHANG and Cheng-Huan CHEN
13:20-14:50	WS04-3
W04-012 F	Addressing Public Speaking Anxiety with an Al Speech Coach Frederick Voltair GARCIA, Jr., Nicanor Froilan PASCUAL, Miguel Elijah SYBINGCO, and Ethel ONG
W04-005 S	Exploring the Impact of Integrating Auto-Photography and Imagery Strategies into Computer-Supported Collaborative Learning: A case Study in a General Education Course on Climate Change  Wen-Lung HUANG and Chia-Jung CHANG
W04-010 S	Developing an LLM-empowered Agent to Enhance Student Collaborative Learning through Group Discussion Sixu AN, Yicong LI, Yu YANG, Yunsi Tina MA, and Guandong XU
15:10-17:00	WS04-4
W04-006 S	Exploring the Effect of Collaborative Programming Learning Environment on Student's Computer Programming Competencies and Cognitive Learning Chia-Jung CHANG and Wen-Lung HUANG
W04-009 S	Investigating the Impact of Kahoot! on EFL Grammar Learning Jonathan Y. CHIN and Ben CHANG
W04-011 S	Designing an LLM-based Dialogue Tutoring System for Novice Programming  Julieto PEREZ and Ethel ONG



### WS06: GenAl in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences

09:00-10:30	WS06-1
	Analyzing teacher-student dialogues in online one-on-one primary mathematics tutoring:
W06-001 F	A lag sequential analysis of group differences
	Gary CHENG, Bo JIANG, Daner SUN, Ming GAO, and Zhixuan SONG
W06-004 F	Supporting Teacher-Student Book Talk and Book Wish Lists with Al-Driven Technology
W00-004 F	Chih-En KUO, Hong-Min TU, Chang-Yen LIAO, and Tak-Wai CHAN
W06-005 F	AVERY: A GenAI-based Approach to Enhancing Learner Engagement in English Writing
W00-005 F	Ka-Lai WONG, Patrick OCHEJA, Brendan FLANAGAN, and Hiroaki OGATA
10:50-12:20	WS06-2
	Panel Discussion
13:20-14:50	WS06-3
	How Al Supports Returning Adult Learners in a Developing Economy: Enhancing
W06-007 F	Academic Writing Through Self-Determination Theory
	Mary Rose MARTINEZ and Ryan EBARDO
	Developing a multimodal learning analytics approach to examine students' cognitive
W06-009 F	presence and metacognition in a metaverse environment
	Yanjie SONG, Lei TAO, Hao DENG, and Jiachen FU
	Integrating ChatGPT into Flipped Learning: Enhancing Students' Creative Writing Skills
W06-010 F	and Perception
	Worapong KHUIBUT, Sasivimol PREMTHAISONG, and Pawat CHAIPIDECH
15:10-17:00	WS06-4
	Competency-based Assessment in the Era of Generative Artificial Intelligence: Perspectives
W06-011 F	of Selected STEM Educators
	Friday Joseph AGBO, Heather Kitada SMALLEY, and Kathryn NYMAN
W06-006 S	A Case Study for Educators with ChatGPT and Plato's Allegory of the Cave
VV00 000 3	Anna Y.Q. HUANG, Jain-Wei TZENG, Chi-Sheng HUANG, Zhi-Chi LIU, and Owen H.Q. LU
	Comparing Students/ Best Every Deflection Needs in College Automation Engineering Course
	Supporting Students' Post-Exam Reflection Needs in College Automation Engineering Cours
W06-008 S	Using LLM Edward ANOLIEFO, Patrick OCHEJA, Regina OCHONU, Brendan FLANAGAN, and Hiroaki OGATA



# WS07: The 7th Workshop on Predicting Performance Based on the Analysis of Reading and Learning Behavior

ruesudy, November 20	
09:00-10:30	WS07-1
W07-001 F	Exploring Cross-Disciplinary Education: Enhancing Science Learning with Digital Picture Books Yan-Yu JAU and Joni Tzuchen TANG
W07-002 F	Methods of Balancing Model Explainability and Performance in Identifying At-Risk Students Tiffany T.Y. HSU, Owen LU, and Brendan FLANAGAN
10:50-12:20	WS07-2
W07-003 F	Effects of the Self-Regulated Learning and Motivation on Learning Achievements of the Programming Courses  Mu-Sheng CHEN and Ting-Chia HSU
W07-004 F	GazeViz: A Web-Based Approach for Visualizing Learner Gaze Patterns in Online Educational Environment  Education DAVALOS, Namrata SRIVASTAVA, Yike ZHANG, Amanda GOODWIN, and Gautam BISWAS



# WS08: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)

09:00-10:30	WS08-1
W08-001 F	Novice Programmers' Saccadic Patterns in Error Message Comprehension and Syntax Error Identification  Caren PACOL, Maria Mercedes RODRIGO, and Christine Lourrine TABLATIN
W08-004 F	Challenges and Opportunities for Designing and Implementing Ubiquitous Game-based Learning to Cultivate Digital Citizenship in Thailand Patcharin PANJABUREE, Gwo-Jen HWANG, Niwat SRISAWASDI, Ungsinun INTARAKAMHANG, and Sasipim POOMPIMOL
W08-005 S	Reducing Undergraduate Students' Information Technologies (ITs) Anxiety through Implementation of Blended Learning: A Case Study in the Basic Natural Science Course Anggiyani Ratnaningtyas Eka NUGRAHENI, Anggraeni Dian PERMATASARI, and Antuni WIYARSI
10:50-12:20	WS08-2
W08-002 F	Predicting Emotional Impact on Peer review, Peer assessment, and Self-Assessments Using Deep Learning and NLP in STEM Education Pascal Muam MAH
W08-008 F	Leveraging Generative AI for Automatic Scoring in Chemistry Education: A Web-Based Approach to Assessing Conceptual Understanding of Colligative Properties Sri YAMTINAH, Dimas Gilang RAMADHANI, Antuni WIYARSI, Hayuni Retno WIDARTI, and Ari Syahidul SHIDIQ
W08-010 S	Fostering TPACK Self-Efficacy among Pre-Service Chemistry Teachers: A Case Study from Indonesia Anggiyani Ratnaningtyas Eka NUGRAHENI and Niwat SRISAWASDI



# WS08: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)

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13:20-14:50	WS08-3	
W08-003 F	Math Learning Application on Mobile Devices Following the STEAM Educational Model Nguyen Manh Thang and Pham-Duc THO	
W08-011 F	Does Interactive Augmented Reality Enhance Primary Students' Geometric Understanding and Visual-Spatial Skills in Mathematics Learning?  Atcharaporn ASSAWAPHUM, Sasivimol PREMTHAISONG, and Pawat CHAIPIDECH	
W08-007 S	Promoting Quantitative Analysis in School Chemistry with Technology-supported Hands-on Laboratory Learning: A Case of Arduino-based Portable Spectrophotometer Ari Syahidul SHIDIQ, Fa'ari SALSABIILA, Murni RAMLI, Sri MULYANI, Hayuni Retno WIDARTI, and NAHADI	
15:10-17:00	WS08-4	
W08-009 F	The Urgency of Small-Scale Laboratory Learning Media with Ethno-Electrochemical Contexts Based on Content Creators Hayuni R. WIDARTI, Sumari, Munzil, Nahadi, Ari S. SHIDIQ, Berliyana I. PANULATSIH, Ghaitsa Z. S. P. PUTRI, Nafisah KHAIRUNNISA, and Deni A. ROKHIMa	
W08-012 F	Exploring the Effect of Marker-Based AR Gamification on Primary Students' Science Concepts and Motivation Pawat CHAIPIDECH, Sasivimol PREMTHAISONG, Phattaraporn PONDEE, and Niwat SRISAWASDI	
W08-006 S	Exploring the Impact of Digital Divide on the Academic Performance of STEM Students in Hybrid Modality  May Marie P. TALANDRON-FELIPE and Jundy V. INTAO	



# WS09: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation

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09:00-10:30	WS09-1
W09-001 S	AR2: Augmented Reality for Enhanced Reading Comprehension  Allan Jay ESTEBAN
W09-002 S	Developing the Interactive Game-based Picture Book "Food Ninja" to Enhance Creativity in Elementary School Students  Wen Chun LAN, De Jun MO, and Joni Tzuchen TANG
W09-003 F	An Estimation of Student Well-being Using Experience Sampling  Arthur NEBRAO, Jr. and Maria Mercedes RODRIGO
W09-004 S	Exploring the Use of Short Video Social Media for Learning ESL in Indonesia Riska SAPUTRA, Tsaqufal JALILY, and Intan SETIANI
W09-005 S	Narrative Introduction Text Generation Support System According to Reader Preferences Ryusei SHIMONAKA, Kota KUNORI, and Tomoko KOJIRI
W09-007 S	Galvanic Skin Responses and Flow: Insights from Multimodal Learning Analytics in Personal Learning Environment Yu-Lin HO, Yuan-Hsuan LEE, and Jiun-Yu WU
10:50-12:20	WS09-2
W09-006 F	Transforming Student Feedback into Institutional Action Plans: A Data-Driven Approach  Arlene Mae CELESTIAL-VALDERAMA
W09-008 F	BioMol DigiGames: An App for the Mastery of Biomolecules Joshua TUMOLVA, John Lorence VILLAMIN, Joselito Christian Paulus VILLANUEVA, and Armando Victor GUIDOTE
W09-009 S	The Era of Learning Programming Through Program: Challenges and Potential of ChatGPT in Revolutionizing High School Programming Education  Tzu-Chi YANG
W09-010 S	Code Visualization System for Writing Better Code through Trial and Error in Programming Learning: Classroom Implementation and Practice Shintaro MAEDA, Kento KOIKE, and Takahito TOMOTO
W09-011 S	Optimization of Non-Verbal Information for English Conversation Agents Using Interactive Evolutionary Computation  Yuma SHIMOSAKA, Emmanuel AYEDOUN, and Masataka TOKUMARU



# WS09: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation

13:20-14:50	WS09-3
W09-012 S	Exploring the Benefits of Strategic Hesitations in Language Learning Robots Ryusei AZUMA, Emmanuel AYEDOUN, and Masataka TOKUMARU
W09-013 S	Zooming In on Educator Well-Being: Exploring Behavior Attributes, Zoom Fatigue, and Burnout Dynamics Kevynn DELGADO, Mary Rose MARTINEZ, Christine Jamela VALSADO, and Ryan EBARDO
W09-014 S	The Effect of Collaborative Anchoring on the Development of Digital Curation Skills Among Nursing College Students  Chunhao CHANG
W09-015 F	Enhancing Health Education and Learning Motivation in Primary Students through Augmented Reality and Game-Base Learning: A Case Study Nattapat BUNYUEN, Pawat CHAIPIDECH, and Sasivimol PREMTHAISONG
W09-016 S	Improving Engagement in Museums through Virtual Reality Educational Escape Rooms (VREER): A Framework and Usability Study  Eric Cesar E. VIDAL, Jr., Nicko CALUYA, Joan Dominique L. LEE, Kenneth King L. KO, Jed Laszlo O. JOCSON, and Gerick Jeremiah Niño N. GO
W09-017 S	Exploring the Effect of Metacognitive Awareness on University Students' Learning Outcomes in the Metaverse: Evidence from Eye-tracking Data  Tinghui WU, Yanjie SONG, and Xuesong ZHAI



### **Doctoral Student Consortium (DSC)**

09:00-10:30	DSC-1
244	Real-time Adaptive Learning Environments Using Gaze and Emotion Recognition Engagement and Learning Outcomes Aboul Hassane CISSE
254	Developing a multimodal learning analytics approach for collaborative learning and metacognitive strategies in virtual learning environments for primary science education Lei TAO and Yanjie SONG
223	Competition and Collaboration: A Multi-Modal Analysis of Cognitive Load and Behavior in Game-based Learning  Lishan ZHENG and Wenli CHEN
10:50-12:20	DSC-2
253	A Proposal for a Quantitative Evaluation Model for Error Image Generation in L2 Vocabulary Learning Kazuki SUGITA, Wen GU, Koichi OTA, Prarinya SIRITANAWAN, and Shinobu HASEGAWA
212	Development and Validation of a Problem-Solving Instrument (Multiple-Choice Questions) for Computational Thinking Among Trainee Teachers in the Klang Valley, Malaysia Ahmad Sarji Abdul HAMED, Su Luan WONG, and Mohd Zariat Abd RANI
217	OKLM: Open Knowledge and Learner Model Using Educational Big Data Kensuke TAKII, Changhao LIANG, and Hiroaki OGATA
13:20-14:50	DSC-3
248	Exploring the Young Learners' Interactions with AI-generated Multimodal Feedback in Collaborative Writing  Xinyu GUO
241	The Bane of AI in Teaching: Innovation Resistance in Higher Education Instructional  Design & Delivery  Estefanie BERTUMEN and Ethel ONG
	Discussion



### Student Wing (SW)

#### Tuesday, November 26

14:30-16:30	Student Wing Workshop
	Chair: <i>Prof. Yanjie SONG</i> , The Education University of Hong Kong
	Introduction
	Topic: <b>Get Your Research Published: Essential Tools and Strategies</b> <i>Yin YANG, The Education University of Hong Kong</i>
	Q&A Session
	Topic: <b>Unlock Your Early Career Success: Tips and Opportunities for Securing Grants</b> Shurui BAI, The Education University of Hong Kong
	Q&A Session
	Interactive Session
	Closing

### Early Career Workshop (ECW)

09:00-10:30	ECW-1
ECW01	Can Use of Technologies help Reduce Biases in Academic Recruitment?  Kashmira DAVE
ECW02	Leveraging Al-Powered Virtual Meeting Summaries: Towards an Evidence-Based Classroom Observation Assessment Arlene Mae CELESTIAL VALDERAMA
	Advisors Tzu-Chi YANG, Assistant Professor, National Yang Ming Chiao Tung University Cheng-Huan CHEN, Associate Professor, National Tsing Hua University Shao-Chen CHANG, Assistant Professor, Yuan Ze University