ICCE 2024
The 32nd International Conference on Computers in Education
MANILA, PHILIPPINES

Keynote Speakers, Theme-Based Speakers, Panels

Wednesday, November 27

10:20–11:20	Keynote Speaker **Getting ready for the age of AI: Developing self-regulated learners** *Dragan Gašević*
11:20–12:20	Panel-3 **Learning Languages in "Smarter" Ways: Theory-Informed Utilization of Smart Technologies in Contextualized, Authentic, and Communicative Language Learning** *Lung-Hsiang WONG, Yun WEN, Vivian Wen-Chi WU, Yoshiko GODA & Ting-Chia HSU*
13:20–14:00	Theme-Based Speaker **How to Better Understand the Collaborative Component in Computer-Supported Collaborative Learning (CSCL): Current Landscape, Challenges and Future Prospects** *Johanna Pöysä-Tarhonen*
15:20–16:20	Panel-1 **Digital Technology for Inclusive and Equitable Quality Education** *Weiqin CHEN, Jon MASON, Faisal BADAR, Shitanshu MISHRA & Maria Mercedes T. RODRIGO*

Thursday, November 28

09:00–10:00	Keynote Speaker **Critical Virtual Exchange for Critical Global Citizenship Education** *Mirjam Hauck*
10:20–11:00	Theme-Based Speakers **In search of Intelligent Pedagogical Content Knowledge (IPACK)** *Ching Sing Chai* **Multi-Modal Learning Analytics for Learning Design** *Wenli Chen*
11:00–12:00	Panel-2 **Global Harwell' in an Examination-Driven Education System and an Excellence-Pursuing Society: Possible? How? Better with Digital Technologies?** *Fu-Yun YU, Tak-Wai CHAN, Sahana Murthy, Su Luan WONG, Wenli CHEN, Hyo-Jeong SO, & Hiroaki OGATA*
13:00–14:00	Keynote Speaker **Learning from Generative AI for Cognitive and Pedagogical Advancement** *Michelle Banawan*

Friday, November 29

09:00–10:00	Keynote Speaker **Personalized Gamification Experiences: From Design to Impact** *Seiji Isotani*

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C1: ICCE Sub-Conference on Artificial Intelligence in Education/Intelligent Tutoring System (AIED/ITS) and Adaptive Learning

Wednesday, November 27

11:20–12:20	**AIED/ITS-1**
58F BSPN	**The Impact of Instructional Videos Supported by AI-driven Tutoring System on EFL Listening and Speaking** *Xiangyu TAN and Xiuyuan ZUO*
137F	**LLM-Generated Personalized Analogies to Foster AI Literacy in Adult Novices** *Chen CAO, Eason CHEN, Zoe Xiao FANG, Lydia CAO, Jionghao LIN, and Ruizhe LI*
14:00–15:00	**AIED/ITS-2**
13S	**UniSpLLM: An Integrated Approach for Enhancing Reasoning and Education with Large Language Models** *Hanyu ZHAO, Yuzhuo WU, Yang YU, Liangyu CHEN, and Xiaohua YU*
106S	**Availability and Effectiveness of Generative AI for Web-based Investigate Learning** *Yutaka WATANABE and Akihiro KASHIHARA*
122S	**Developing a LLMs-driven System Based on Human-AI Progressive Code Generation Framework to Assist Mathematics Learning** *Chun Yan Enoch SIT, Yin YANG, Wing Kei YEUNG, and Siu Cheung KONG*
15:20–16:50	**AIED/ITS-3**
175F	**Evaluating the Performance of Copula based Item Response Theory Models for Interpretable Assessment** *Eduardo GUZMÁN and Eva MILLAN*
80S	**Enhancing Diversity in Difficulty-Controllable Question Generation for Reading Comprehension via Extended T5** *Teruyoshi GOTO, Yuto TOMIKAWA, and Masaki UTO*
190S	**The Effect of Feature Reliability on the Generalization of Machine Learning Models in Educational Data** *Yingbin ZHANG*
258ES	**Exploring High School Students' Transition from Traditional Search Engines to ChatGPT for Course learning: A Push-Pull-Mooring Model Perspective** *Chien-Liang LIN, Chih-Yu YANG, Pei-Chi WU, Chi-Heng LI, and Yu-Cheng LIN*
266ES	**Exploring Dialogue Patterns in Argumentation with Pre-set ChatGPT Personas** *Seunmin EUN*

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C1: ICCE Sub-Conference on Artificial Intelligence in Education/Intelligent Tutoring System (AIED/ITS) and Adaptive Learning

Thursday, November 28

11:00–12:00	**AIED/ITS-4**
94F BOPN	**Predicting and Analyzing Students' Higher-Order Questions in Collaborative Problem-Solving** *Shan ZHANG, Toni EARLE-RANDELL, Qian SHEN, Anthony F. BOTELHO, Maya ISRAEL, Kristy Elizabeth BOYER, Collin F. LYNCH, and Eric WIEBE*
120F BTDPN	**Reflection Support System with Audience Robots for Presentation Practice** *Yuya KISHIMOTO and Tomoko KOJIRI*
15:50–16:50	**AIED/ITS-5**
151F	**Facilitating Holistic Evaluations with LLMs: Insights from Scenario-Based Experiments** *Toru ISHIDA, Tongxi LIU, Hailong WANG, and William CHEUNG*
126S	Is **Internal State Feedback in an E-learning Environment Acceptable to People?** *Atsushi ASHIDA, Ryosuke KAWAMURA, Shizuka SHIRAI, Noriko TAKEMURA, Mehrasa ALIZADEH, Hideaki HAYASHI, and Hajime NAGAHARA*
211ES	**Integrating Explanations in Active Video Watching** *Raul Vincent LUMAPAS, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Jay HOLLAND, and Pasan PEIRIS*

Friday, November 29

10:20–11:10	**AIED/ITS-6**
238ES	**Personalized Comment Reviewing in Active Video Watching: Investigation of Learners' Cognitive Load** *Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, and Jay HOLLAND*
251ES	**AI-Driven Feedback for Enhancing Students' Mathematical Problem-Solving: The ScaffoldiaMyMaths System** *Daner SUN and Jingyun WANG*
259ES	**A Study on High School Students' Continuance Intention to Use ChatGPT for Learning Assistance: An Exploration Based on Self-Determination Theory** *Tian-Yun LIN, Chien-Liang LIN, Shi-En LIN, Yu-Chen LIN, and Chi-Heng LI*

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C2: ICCE Sub-Conference on Computer-supported Collaborative Learning (CSCL) and Learning Sciences

Wednesday, November 27

14:00–15:00	CSCL-1
31F	**Unveiling the Interplay of Students' Epistemic Emotions and Knowledge Building Activities in Design Studios** *Alwyn Vwen Yen LEE, Chew Lee TEO, Aloysius ONG, and Katherine YUAN*
144F BOPN, BSPN	**MESHing Minds: Bridging the Gap Between Creativity and IoT Programming Through Collaborative Mixed Reality** *Yusuke SAKABE, Emmanuel AYEDOUN, and Masataka TOKUMARU*

Thursday, November 28

14:00–15:30	CSCL-2
52S	**Students' Verbal Interaction Patterns in Computer-Supported Collaborative Learning: The Role of Individual Preparation** *Wenli CHEN, Lishan ZHENG, Mei-Yee Mavis HO, Qianru LYU, Hua HU, and Zirou LIN*
88S	**Enhancing Social Learning in Active Video Watching** *Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Jay HOLLAND, and Negar MOHAMMADHASSAN*
124S	**Rethinking Trust in Human-AI Collaboration in the generative AI era** *Yijie LU and Bo Jiang*
147S	**Infrastructuring for Collective Cognitive Responsibility: A Case Study of a Student Collaboratory Design** *Chew Lee TEO, Aloysius ONG, Alwyn Vwen Yen LEE, Guangji YUAN, and Kennedy LOO*
148S	**Review of different assessment methods used by Online Inquiry-based learning systems** *Nitesh Kumar JHA, Plaban Kumar BHOWMIK, and Kaushal Kumar BHAGAT*
200S	**Investigating Secondary School Students' Academic Emotions in Data Science Learning** *Gaoxia Zhu, Chew Lee TEO, Katherine Guangji YUAN, Chin Lee KER, Aloysius ONG, and Alwyn Vwen Yen LEE*

Friday, November 29

10:20–11:10	CSCL-3
185F	**Online making-based learning at scale: Towards equity in STEM learning** *Deeksha GAUTAM, Aditi KOTHIYAL, Rashmi SHEORAN, Neha GARG, Adithi IYER, Ashutosh BHAKUNI, Jay THAKKAR, Jyothi KRISHNAN, and Manish JAIN*
99S	**Verbal Interaction Patterns in Online Collaborative Learning Design: Comparison of High Performing and Low Performing Groups** *Wenli CHEN, Lishan ZHENG, Mei-Yee Mavis HO, Hua HU, and Qianru LYU*

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C3: ICCE Sub-Conference on Advanced Learning Technologies (ALT), Learning Analytics and Digital Infrastructure

Wednesday, November 27

11:20–12:20	**ALT-1**
64F	**Proficiency modeling in junior high math: adapted cognitive statistical models to e-book learning contexts** *Changhao LIANG, Kensuke TAKII, and Hiroaki OGATA*
98F	**An Embodied Projection Recognition System for Situated Learning to Enhance Learning Effectiveness and Self-Reflection Ability** *Hui-Ting LIU, Zi-Ting DING, Su-Hang YANG, Jian-Yu WU, Jen-Hang WANG, Po-Yao CHAO, Yung-Yu ZHUANG, and Gwo-Dong CHEN*
14:00–15:00	**ALT-2**
196F BOPN	**Combining multimodal analyses of students' emotional and cognitive states to understand their learning behaviors** *Ashwin T S, Caitlin SNYDER, Celestine AKPANOKO, Srigowri M P, and Gautam BISWAS*
136S	**Development of Metacognitive Reflection Support System on Creative Discussion** *Toshimasa SHIMIZU, Yuki HAYASHI, and Kazuhisa SETA*
149S	**Utilization of Japanese Public Educational Data by Retrieval Augmented Generation for Policy Research** *Kyosuke TAKAMI*
15:20–16:50	**ALT-3**
97F	**Analyzing Student Behavior in Viat-map: Steps and Time as Performance Indicators** *Banni Satria ANDOKO, Vivin Ayu LESTARI, Agung Nugroho PRAMUDHITA, Amalia NURAINI, Inda Khoirun NISAK, and Tsukasa HIRASHIMA*
113F	**Comparison of Learners' Self-direction Behavior Across Contexts and Phases** *Junya ATAKE, Chia-Yu HSU, Huiyong LI, Izumi HORIKOSHI, Rwitajit MAJUMDAR, and Hiroaki OGATA*
131S	**Progressive Behavior Patterns of Online Discussion at Different Circle of Self-Regulated Learning** *Shih-Hua HUANG, De-Yu SHIAU, Yung-Sian FANG, and Ting-Chia HSU*
143S	**Forest/CR: Critical Paper Reading Support System** *Tomoya KII, Kazuhisa SETA, and Yuki HAYASHI*

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C3: ICCE Sub-Conference on Advanced Learning Technologies (ALT), Learning Analytics and Digital Infrastructure

Thursday, November 28

11:00–12:00	**ALT-4**
4S	**Exploring the Relationship of Personality Domains and Visual Attention Patterns in Novice Programmers** *Caren PACOL, Maria Mercedes RODRIGO, and Christine Lourrine TABLATIN*
35S	**Construction of a Japanese Language Learning Support System that Enables Word Accent Learning** *Satoru KOGURE, Kazuki TOMITA, Yasuhiro NOGUCHI, Koishi YAMASHITA, Tatsuhiro KONISHI, and Makoto KONDO*
41S	**Developing a feedback analytic tool to support instructor reflection** *Feng LIN, Chenchen LI, Rebekah Wei Ying LIM, and Yew Hau LEE*
139S	**Effect of Re-composition Concept Mapping for Sharing Reference Maps on Serial Concept Mapping: A Preliminary Study** *Rian FITRIANSYAH, Harry Budi SANTOSO, Lia SADITA, Baginda Anggun Nan CENKA, Syifa NURHAYATI, Yusuke HAYASHI, and Tsukasa HIRASHIMA*
14:00–15:30	**ALT-5**
48F BTDPN	**Designing Recommendations for Productive Learning Habit-building from Learning Logs** *Chia-Yu HSU, Izumi HORIKOSHI, Huiyong LI, Rwitajit MAJUMDAR, and Hiroaki OGATA*
101F	**Designing Interaction Scenario for Alleviating Persistence in Learning Strategies** *So SASAKI and Akihiro KASHIHARA*
166F	**Enhancing Vocational Training Through Immersive Technology: A Study on Digital Magic Mirrors** *Jen-Hang WANG, Hung-Wei TSENG, Su-Hang YANG, Chih-Kai CHANG, Yung-Yu ZHUANG, and Gwo-Dong CHEN*
145S	Facilitating Thinking Like a Historian in Open-ended Learning Space: A White Box Approach *Aoi Matsuura, Yuki Hayashi and Kazuhisa Seta*
15:50–16:50	**ALT-6**
91S	**Boosting Course Recommendation Explainability: A Knowledge Entity-Aware Model using Deep Learning** *Tianyuan YANG, Baofeng REN, Boxuan MA, Tianjia HE, Chenghao GU, and Shinichi KONOMI*
191S	**Error Tolerance in Automatic Short Answer Grading with Large Language Models: The Case of Handwriting Recognition Errors** *Ziqi TAN, Yingbin ZHANG, and Su MU*
209ES	**Identifying Key Indicators of Proficiency in Junior High Math : Roles of Daily Handwriting Learning Logs** *Yudai OKAYAMA, Changhao LIANG, Kensuke TAKII, and Hiroaki OGATA*
267ES	**Relationship Analysis Between Procrastination Behavior and Non-cognitive Abilities** *Yasuhisa TAMURA and Keito MORINO*

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C3: ICCE Sub-Conference on Advanced Learning Technologies (ALT), Learning Analytics and Digital Infrastructure

Friday, November 29

10:20–12:00	**ALT-7/8**
70F	**Effectiveness of Information Organizing Activities After Lecture in Mathematics: A Comparison between Kit-Build Concept Mapping and Structured Summary Writing** *Lintang Matahari HASANI, Kasiyah JUNUS, Lia SADITA, Tsukasa HIRASHIMA, and Yusuke HAYASHI*
77F BSPN	**Automated Recommendations for Revising Lecture Slides Using Reading Activity Data** *Erwin Daniel LÓPEZ ZAPATA, Cheng TANG, Yuta TANIGUCHI, Fumiya OKUBO, and Atsushi SHIMADA*
40S	**Optimizing Causal Inference Approach for Exploring Shallow Reading Behavior with Generative Adversarial Networks** *Yu BAI, Fuzheng ZHAO, Wenhao WANG, and Chengjiu YIN*
60S	**Exploring Linguistic Sophistication of Discussion Board Posts in University Learning Management Systems** *Michelle P. BANAWAN, Clarence James MONTEROZO, and Maria Mercedes T. RODRIGO*
227ES	**Toward Contextualized Handwriting Process Analysis: Comparison between Problem Types in Math** *Shunsuke TONOSAKI, Taito KANO, Satomi HAMADA, Izumi HORIKOSHI, and Hiroaki OGATA*
13:00–14:00	**ALT-9**
9S	**Code Tracing Support Environment Based on Visualization of Cooperative Behavior of Multiple-Flows** *Yasuhiro NOGUCHI, Kotaro SUNAMA, Satoru KOGURE, Raiya YAMAMOTO, Koichi YAMASHITA, and Tatsuhiro KONISHI*
90S	**Peer Feedback Feature Analysis with Large Language Models: An Exploratory Study** *Qianru LYU, Zirou LIN, and Wenli CHEN*
214ES	**Relationship Between Students' Scores of Weekly Tests and Final Exam** *Satomi HAMADA, Izumi HORIKOSHI, and Hiroaki OGATA*
218ES	**Exploring reading speed profiles in EFL extensive reading** *Hatsune ICHIDATE, Yiling DAI, Brendan FLANAGAN, and Hiroaki OGATA*

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C4: ICCE Sub-Conference on Technology Enhanced Learning for Mobility of Learners and Learning Experiences (TEML)

formerly known as Classroom, Ubiquitous and Mobile Technology-Enhanced Learning (CUMTEL)

Wednesday, November 27

11:20–12:20	TEML-1
71F BSPN	**Linking Real-World Experiences with Course Contents: A Text Mining Approach Toward Effective "There and Back Again"** *Manabu ISHIHARA, Izumi HORIKOSHI, and Hiroaki OGATA*
75F BTDPN	**Marrying Physical and Virtual Realms: An Embodied, Multi-Modal Approach to Situational Learning in Digital Reality** *Vando Gusti AL HAKIM, Yao-En CHEN, Meng-Heng LIN, Chia-Ying CHANG, Jen-Hang WANG, Chih-Kai CHANG, Yungyu ZHUANG, Su-Hang YANG, and Gwo-Dong CHEN*

Thursday, November 28

11:00–12:00	TEML-2
132F	**Classifying Self-Reflection Notes: Automation Approaches for GOAL system** *Zixu WANG, Chia-Yu HSU, Izumi HORIKOSHI, Huiyong LI, Rwitajit MAJUMDAR, and Hiroaki OGATA*
50S	**Using Educational VR Systems to Promote Inquiry-Based Learning in Natural Science** *Shu-Ying TSAI, Zhi-Hong CHEN, and Min-Hsuan WENG*
135S	**Generative Artificial Intelligence in Education: Evaluating Students' Self-efficacy and Utilization in their Homework** *Elanie VIZCONDE, Ma. Rowena CAGUIAT, and Ethel ONG*

Friday, November 29

10:20–12:00	TEML-3/4
51F BOPN	**Low vs. high immersion in Metaverse-based learning: How pre-service teachers balanced between instruction and assessment in learning design** *Darmawansah DARMAWANSAH, Dani PUSPITASARI, and Gwo-Jen HWANG*
160S	**Participatory Design of an AI Digital Textbook with Deaf and Hard-of-Hearing Students** *Ga Young LEE, Jieun CHOI, Seonhee NA, and Hyo-Jeong SO*
161S	**Technology Considerations in Building Virtual Educational Avatars** *Antun DROBNJAK and Ivica BOTICKI*
194S	**Data-driven Peer Recommendation and Its Applications in Extracurricular Learning** *Peixuan JIANG, Changhao LIANG, and Hiroaki OGATA*

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C5: ICCE Sub-Conference on Educational Gamification and Game-based Learning (EGG)

Wednesday, November 27

15:50–16:50	EGG-1
16F BSPN	**Design and Evaluation of the Usability of a Game-based Learning Application for Learners with Dyslexia** *Vincent GARCIA, Arnel OCAY, Joshua PERADILLA, Mary Rose SAGUIPED, and Myla Karen ARENAS*
72F	**Comparing Effects of Adaptive Gamification and One-size-fits-all Gamification on Students' Task Completion Process and Learning Performance** *Shurui BAI and Yingxue LIU*
162F BOPN	**Dialogue Game-based Learning for AI Ethics Education** *Hyo-Jeong SO and Sung-Eun KIM*
125S	**Detecting Off-task Behavior of Learners in Minecraft Using Exploration and Personalized Features** *Maricel A. ESCLAMADO and Maria Mercedes T. RODRIGO*

Thursday, November 28

14:00–15:30	EGG-2
65F BTDPN	**A Robot-assisted Scenario Training for Students with ASD** *Ka Yan FUNG, Kwong Chiu FUNG, Tze Leung Rick LUI, Feifan PANG, Huamin QU, Shenghui SONG, and Kuen Fung SIN*
103F	**Exploring the Impact of Incorporating Digital Escape Room on Learners' Performance and Motivation in Environmental Sustainability Education** *Yu-Chao LAI and Jie-Chi YANG*
133S	**Middle School Students' Ability to Detect Lies When Interacting with an Educational AI Robot** *Ahmed SALEM and Kaoru SUMI*

Friday, November 29

13:00–14:00	EGG-3
73S	**FLOU: Evaluating the Intrinsic Motivation of Learners in Gamifying Academic Programs through a Gamified Mobile Application** *Ma. Louisa PEREZ, Marl Vincent AGRAVANTE, Jeru Kian FERNANDEZ, and Joshua MARTINEZ*
164S	**Designing an Educational Game for Facilitating Development of Media and Information Literacy** *Jun XIE, Xiang LI, Kotomi HASEGAWA, Zhichun LIU, and Frank REICHERT*
262ES	**Developing a Visualized Data Guessing Game to Assess Data Literacy** *Ruei-Yi XIE and Ming-Chi LIU*

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C6: ICCE Sub-Conference on Technology Enhanced Language Learning (TELL)

Wednesday, November 27

14:00–15:00	TELL-1
123F BSPN	**TAMMY: Supporting EFL Translation Practice With an LLM-Powered Chatbot** *Steve WOOLLASTON, Brendan FLANAGAN, Patrick OCHEJA, Yiling DAI, and Hiroaki OGATA*
172F BTDPN	**Impact of Online Video Dubbing Activities on Grade 5 Students' Pronunciation, Accuracy, and Fluency in English Speaking: An Experimental Research** *Min XIE and Alex Wing Cheung TSE*

Thursday, November 28

15:50–16:50	TELL-2
158F BOPN	**Open Knowledge and Learner Model: Mathematical Representation and Applications as Learning Support Foundation in EFL** *Kensuke TAKII, Changhao LIANG, and Hiroaki OGATA*
157S	**The Effect of LINE Chatbot with Escape Game Design on English Learning Achievement, Situational Interest, and Student Engagement** *Elva Yi Fang LO and Jerry Chih-Yuan SUN*
112S	**Examining Augmented Reality's Influence on Pronunciation Training: Insights from PinyinGuo's Application and Comparative Avatar Testing** *Daria SINYAGOVSKAYA*

Friday, November 29

11:10–12:00	TELL-3
115S	**Improve English Pronunciation at Word Level for Thai EFL Learners in Southern Region using End-to-End Automatic Speech Recognition** *Nattapol KRITSUTHIKUL, Kongpop BOONMA, Jirapond MUANGPRATHUB, Wasan Na CHAI, and Thepchai SUPNITHI*
128S	**Investigation on the Usage Status of a Support System for Writing English Paragraph Outlines in English Classes** *Afifah ILHAM, Tomohiro KUROKI, Akira NAKANO, and Hidenobu KUNICHIKA*
152S	**Mapping Morphological Patterns: A Framework for Rinconada Bikol Language Morphological Analysis and Stemming** *Tiffany Lyn PANDES and Joshua MARTINEZ*
13:00–14:00	**TELL-4**
14S	**Enhancing Chinese Language Education through AI-Assisted Project-Based Learning: A Qualitative Study on Learning Values and Multimedia Skills Development** *Satoko SUGIE*
184S	**Development of a Chatbot and Evaluation of its Effects on Learning and Intrinsic Motivation of a Public Secondary School's Spanish Language Learners** *Julian Eymard JANUBAS, Josiah Jose DEYSOLONG, Hanz Lucas ESTOPIA, Karl Mykell TABBAY, and Jun Rangie OBISPO*
186S	**Enhancing Language Learning through Multimodal AI-Driven Feedback on Picture Descriptions: An Eye-Tracking Study** *Ruibin ZHAO, Zhiwei XIE, Yipeng ZHUANG, Huixian LI, and Philip L.H. YU*

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C7: ICCE Sub-Conference on Practice-driven Research, Teacher Professional Development and Policy of ICT in Education (PTP)

Wednesday, November 27

11:20–12:20	**PTP-1**
24F	**Do Academic Stress and Risk Propensity Affect Behavioral Intention to Use ChatGPT among University Students?** *Brylle SAMSON, Ronnie LURIAGA, and Ryan EBARDO*
53F	**Who is a good computational thinker? Mapping Behavioral Dispositions of Middle-School Children Based on Real-Life, Algorithmic Tasks** *Shashaank PINNAMARAJU, Lazar TONY, and Anveshna SRIVASTAVA*
15:20–16:50	**PTP-2**
61F BOPN	**Representing Learning Progression of Unguided Exercise Solving: A Generalization of Wheel-Spinning Detection** *Taisei YAMAUCHI, H. Ulrich HOPPE, Yiling DAI, Brendan FLANAGAN, and Hiroaki OGATA*
6S	**Factors Contributing to the Negative Online Learning Academic Self-Concept of College Students** *Rex BRINGULA, Edmon TORRES, Roman Paulo BAET, Ralph Lawrence GARCIA, Franchesca Mari MORALES, Jan Carlo RAMOS, and Hanna Sophia SARMIENTO*
7S	**Teachers' Perspectives on Integrating AI tools in Classrooms: Insights from the Philippines** *Vanessa SIBUG, Vicky VITAL, John Paul MIRANDA, Emerson FERNANDO, Almer GAMBOA, Hilene HERNANDEZ, Joseph Alexander BANSIL, Elmer PENECILLA, and Dina GONZALES*
10S	**Research on the Dual-Pathway Impact of Artificial Intelligence Technology on Teachers' Human-Machine Collaboration** *Yujie XU and Yiling HU*
30S	**Does Learning Interest Predict Academic Performance in an Interest-driven HyFlex Course?** *Liang Jing TEH, Su Luan WONG, Mohd Zariat ABDUL RANI, Mas Nida MD KHAMBARI, and Sai Hong TANG*

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C7: ICCE Sub-Conference on Practice-driven Research, Teacher Professional Development and Policy of ICT in Education (PTP)

Thursday, November 28

11:00–12:00	**PTP-3**
19S	**Using a Teaching Framework to Identify Resilient and Persistent Teaching Practices During the Pandemic** *Ma. Monica MORENO, Johanna Marion TORRES, Timothy Jireh GASPAR, Jenilyn CASANO, and Maria Mercedes RODRIGO*
92S	**Evaluating the Effectiveness of a Professional Development Course on Artificial Intelligence Literacy for Administrative Staff in Higher Education** *Siu Cheung KONG, Zoe Wai Sum MAK, Yue WU, and Yin YANG*
140S	**From textbooks to classroom implementation: Experience report of middle school science teachers' pedagogy for activity-based learning** *Zun Phoo MO, Sunny Prakash PRAJAPATI, Sheeja VASUDEVAN, and Sahana MURTHY*
155S	**Appropriating AI-powered Pedagogical Affordances for Vocabulary Learning** *Xinyu GUO and Yun WEN*
14:00–15:30	**PTP-4**
114F BTDPN	**Extraction of Important Characteristics for Data-informed Guidance and Counseling from Daily Usage Log Data** *Junya ATAKE, Chia-Yu HSU, Izumi HORIKOSHI, and Hiroaki OGATA*
146F	**Driving Informed EdTech Quality Decision-making: A Research-Practice Partnership-Based Solution For Diverse Stakeholders' Needs** *Ishika ISHIKA, Angelina Susan PHILIP, Sheeja VASUDEVAN, and Sahana MURTHY*
20S	**Determinants of ChatGPT Adoption in Academe & Other Fields – A Review on Theoretical Perspective** *Gerand Boy ELINZANO and Michelle Renee CHING*
171S	**Exploring the Entanglement between Technology and Pedagogy: A Case Study of Knowledge Building** *Yee Yin Tan, Seng Chee TAN, and Chew Lee TEO*
15:50–16:50	**PTP-5**
95S	**Determinants of ICT Competency Among Public School Teachers in Bukidnon** *Gladys AYUNAR, Nathalie Joy CASILDO, May Marie TALANDRON-FELIPE, Kent Levi BONIFACIO, Jinky MARCELO, and Fe SEBUGUERO*
226ES	**Preliminary Exploration on the Dimensions of Digital Learning Agility among Teachers in Malaysia** *Nur Dania MOHD ROSLI, Kamilah ABDULLAH, Mas Nida MD KHAMBARI, Su Luan WONG, Noor Syamilah ZAKARIA, Priscilla MOSES, and Nur Aira ABDRAHIM*
228ES	**Analysis of Factors Influencing Teacher Behavioural Engagement in Distance Training Based on MOA and SDT** *Zhou JIN*
257ES	**The Impact of AI Literacy on Teacher Efficacy and Identity: A Study of Korean English Teachers** *Seunmin EUN*

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Poster Session 1

Wednesday, November 27
16:50–17:50

AIED/ITS	
47P	**Image-Based Pili (Canarium ovatum, Engl.) Fruit Variety Classifier App: An Approach to Enhancing Teaching Biodiversity and Crop Science** *Leo Constantine BELLO and Joshua MARTI*
54P	**Authorship Forensics Portal** *Robert SCHMIDT, Maiga CHANG, Hsiang-Han CHENG, Greg FREDIN, Kevin HAGHIGHAT, and Rita KUO*
55P	**Designing learner-centered collaborative learning by incorporating AI-based teacher/learner agents with a cognitive model** *Yugo HAYASHI, Shigen SHIMOJO, and Tatsuyuki KAWAMURA*
59P	**Student Perceptions of Using Generative AI-driven Chatbot in Learning Programming** *Ean Teng KHOR, Leta CHAN, Elizabeth KOH, and Peter SEOW*
ALT	
12P	**Towards the Development of PIA 2.0: A Pedagogical Agent that Exhibits Synthetic Facial Expressions** *John Lorenz DELA CRUZ, Paulyn Joy DELA CRUZ, Joyce Antonette GUADALUPE, Jiabianca MACARAEG, Piolo Jose MONTESA, Mark Paul RAMOS, and Rex BRINGULA*
32P	**Early Detection of At-Risk Students through Learning-Activity Forecasting** *Yuya Ozaki, Daisuke Deguchi, Haruya Kyutoku and Hiroshi Murase*
165P	**What Insights Are Gained from Students' Trace Data in Homework?** *Satomi Hamada, Yuko Toyokawa, Taito Kano, Izumi Horikoshi and Hiroaki Ogata*
TEML	
36P	**A TPB-TAM Approach to Identifying Adoption Factors of Hyflex among Educators** *Elanie VIZCONDE, Joshua ISAGUIRRE, Gabriel Luis LIWANAG, and Ryan EBARDO*
111P	**Designing Interactive Mathematical Teaching Tools for Tablet-Based Learning: Enhancing Student Engagement and Tactile Exploration** *Loong-Chuan LEE, Chia-Ying LIN, Yu-Han TAN, and Kuo-Yu LIU*
TELL	
127P	**Implementation and an Evaluation of a Search Function Allowing Misspelling for a Japanese Learning System** *Hidenobu KUNICHIKA and Miguel Antonio VILLALOBOS ZUNIGA*
PTP	
2P	**An Experience Sampling Study of Student Emotional Life: Preliminary Results** *Maria Mercedes T. RODRIGO, Liane Peña ALAMPAY, Queena N. LEE-CHUA, and Irish Danielle MORALES*
3P	**Theory-driven Design for the Development of a Student-Centered Error-correction Online Learning System** *Fu-Yun YU*
62P	**Contextual factors affecting large-scale educational technology implementation: policy intention versus practice** *Arjun PRASAD, Jayakrishnan WARRIEM, and Sridhar IYER*
WIPP	
216WIPP	**Support System for Focused Discussion in Consensus Building for Team Sports** *Kazuma KUWADA and Tomoko KOJIRI*
222WIPP	**Understanding Collaborative Teacher Growth from the Lens of Digital Learning Agility: A Pathway to Educational Excellence** *Kamilah ABDULLAH, Mas Nida MD KHAMBARI, Su Luan WONG, Noor Syamilah ZAKARIA, Nur Dania MOHD ROSLI, Priscilla MOSES, and Nur Aira ABD RAHIM*
239WIPP	**Online Educational Game for Realistic Interior Design with Design Thinking Process and Multidimensional Scaffolding** *Chou-Pai YEOH and Huei Tse HOU*
247WIPP	**Microlearning strategy in ICT education** *Kotaro TORII*
250WIPP	**What do Students Say About ChatGPT? A Topic Modeling Analysis of Perception on GenAI in Academic Writing** *Lingxi JIN, Kyuwon KIM, Hyo-Jeong SO, and Ga Young LEE*
265WIPP	**Generative AI and XR in Education: Student Co-Created Metaverse Worlds in an International Virtual Exchange** *Masako HAYASHI*
SATELUC	
202SAT	**Practical Skills Acquisition in Domestic Wiring as Determinants of Entrepreneurship Development among Undergraduate Students In Nigeria** *Ismaheel Adewale BADRU*
207SAT	**Transforming Education in Timor-Leste: The Role of e-Learning and Artificial Intelligence in Boosting Student Achievements** *Estanislau Sousa SALDANHA, Edio DA COSTA, Aderita Mariana TAKELEB, Salustiano DOS ROEIS PIEDADE, and Carla Alexandra DA COSTA*
208SAT	**Learning with Virtual Avatars: Insights into Performance and Resource Needs** *Antun DROBNJAK and Ivica BOTICKI*
219SAT	**MS Teams acceptance factors among Polish and Ukrainian students** *Nataliia DEMESHKANT, Sławomir TRUSZ, Tetiana MATUSEVYCH, and Amy SEPIÓŁ*
225SAT	**Boosting Literacy with an Educational RPG For Polytechnic Students** *Agung PRAMUDHITA, Puteri MAWANGI, and Banni ANDOKO*
230SAT	**Development of the Board Game 'Career Champion': Gamification for Understanding Job Interview Preparation** *Farid Angga PRIBADI, Eng. Banni Satria ANDOKO, and Erina SEVIYANTI*
232SAT	**AI Tools Experience in Civitas Academic Portal in Timor Leste** *Agostinho Dos Santos GONÇALVES, Sebastião PEREIRA, and Saida ULFA*
233SAT	**AI Literacy among Lecturers in University: A Case Study in a Private University in Timor Leste** *Agustinho Dos Santos GONCALVES, Jacinto DE OLIVEIRA JUNIOR, Natalino Pereira PARADA, and Saida ULFA*
235SAT	**Tridharma-Based Lecturer Performance Assessment System Using the Saw Method** *Anita GUTERRES, Delfim DA SILVA, Antonio GUTERRES, and Joaquim DE JESUS VAZ*
252SAT	**AI as a Co-Teacher: Enhancing Creative Thinking in Underserved Areas** *Roberto ARAYA*
268SAT	**Global Trends in Computational Thinking in Curricula: A Comparative Review** *Martha Nury BONILLA-CASTAÑEDA, Klinge Orlando VILLALBA-CONDORI, Hector CARDONA-REYES, Claudia Acra-DESPRADEL, and Kee-Fui TURNER-LAM*

ICCE 2024
The 32nd International Conference on Computers in Education
MANILA, PHILIPPINES

Poster Session 2

Thursday, November 28
16:50–17:50

AIED/ITS	
66P	**Quality Criteria Acquisition Support System of a Product by Explaining It with Components** *Kota KUNORI and Tomoko KOJIRI*
74P	**Exploring Explainable Artificial Intelligence in Active Video Watching** *Raul Vincent LUMAPAS, Antonija MITROVIC, Matthias GALSTER, and Sanna MALINEN*
87P	**A Proposal of Quality Assurance Programming Exercise** *Nobuya ISHIHARA, Samsul HUDA, and Yasuyuki Nogami*
89P	**Enhancing Engagement in Distance Learning: Overcoming Learner Isolation through ICT Tools** *Kumiko AOKI, Itaru KANEKO, Ken KURIYAMA, Takeo TATSUMI, and Takahiro MIYAJIMA*
96P	**Scaffolding Students' Ill-structured Problem Solving Via LLM -- Multi-armed Bandit Problem as a Case** *Jiayi LIU and Bo JIANG*
102P	**Navigating Europe's Artificial Intelligence Act: Application of LLMs in classrooms** *Upasana DASGUPTA and Rwitajit MAJUMDAR*
142P	**Learning Support Environment with Fill-in-Blank Exercise Based on Program Visualization System** *Koichi YAMASHITA, Shuya SUZUKI, Satoru KOGURE, Yasuhiro NOGUCHI, Raiya YAMAMOTO, Tatsuhiro KONISHI, and Yukihiro ITOH*
CSCL	
38P	**Pyzzles: Towards the design of a Zugzwang-inspired Learning Tool for Novice programmers and its effect on Debugging Skills and Self-Perceived Debugging Confidence** *Elijah Justin CALLANTA*
195P	**BioAnalogica: Designing SBF-Based Analogical Stories to Enhance Understanding of Complex Biological Processes** *Meera PAWAR, Sheeja VASUDEVAN, and Sahana MURTHY*
198P	**Challenging the Eye-Mind Link Hypothesis: Visualizing Gazes For Each Programming Problem** *Michael T. LOPEZ II*
ALT	
49P	**Program Learning Support System with Visualization Reflecting Teacher's Intent for Learner's Code** *Kenzo KOBAYASHI, Satoru KOGURE, Yasuhiro NOGUCHI, Raiya YAMAMOTO, Koichi YAMASHITA, Tatsuhiro KONISHI, and Yukihiro ITOH*
154P	**Development of Annotation System for Learning from Others in Public Space Design using Extended Reality** *Toshiki MUGURUMA, Yusuke YAGI, Yusuke KOMETANI, Saerom LEE, Naka GOTODA, and Rihito YAEGASHI*
156P	**Development of Labourer Digital Twin Generation and Visualization Function for Hazard Prediction in Off-site Training** *Kaito MINOHARA, Toshiki MUGURUMA, Yusuke KOMETANI, Naka GOTODA, Saerom LEE, Ryo KANDA, Shotaro IRIE, and Toru HARAI*
176P	**HyCode: A Code Similarity Assessment Tool Utilizing Reccurent Neural Networks** *James ABAWAG, Aleczia TORDILLA, and Joshua MARTINEZ*
178P	**Empowering Educational Researchers with a Privacy-Centric Data Platform: Design, Implementation, and Implications** *Isanka WIJERATHNE, Brendan FLANAGAN, and Hiroaki OGATA*
199P	**Exploring the relationship between assignment submission behavior and final grade of information literacy education using big data** *Yuki OE, Etsuko KUMAMOTO, Huiyong LI, and Chengjiu YIN*
EGG	
5P	**Exploring the Effects of Leaderboards on an Online Professional Development Course for Teachers** *Aime Michelle LAZARO and Marlene DE LEON*
170P	**Game-Based College English Translation Instructional Design Based on Representational Redescription Model: Implicit Knowledge Transformed into Explicit Knowledge** *Xinyu JIANG, Mengya CHEN, and Lu HUANG*
PTP	
11P	**Online Student Testlet-generation as an Innovation Approach to Student-Created Assessment: Its Learning Effects** *Fu-Yun YU and Ya-Shin CHANG*
110P	**AI and Data Science Literacy Framework for Educators** *Nurul Amelina NASHARUDDIN, Nurfadhlina MOHD SHAREF, and Mohd Khaizer OMAR*
138P	**Challenges to Augmenting Literacy in the Digital Environment** *Khalid KHAN and Jon MASON*
169P	**Unboxing Learner Engagement in an Online SEL for Teachers Course on FramerSpace** *Hritik GUPTA, Nandini CHATTERJEE, and Shitanshu MISHRA*
WIPP	
221WIPP	**Influence of Telepresence Robot on Discussion in Hybrid Classes** *Hiroaki ARUGA and Akihiro KASHIHARA*
234WIPP	**Proposal for Simulation Environment to Support Understanding of Tactical Positioning** *Yuki OHTSUKA and Tomoko KOJIRI*
240WIPP	**An online MMORPG card game based on multi-dimensional scaffolding to develop reading comprehension and contextual problem-solving skills** *Cheng-Tai LI, Chou-Pai YEOH, Yu-Chi CHEN, Hung-Yu CHAN, Yun-Chien CHUANG, Yu-Jen LIN, Min-Hsiong HONG, and Huei Tse HOU*
249WIPP	**Instructors' perceptions and use of feedback dashboard** *Feng LIN and Rebekah Wei Ying LIM*
255WIPP	**Exploring Student Emotion via Facial Expressions using Transfer Learning** *Tita HERRADURA, Merlin Teodosia SUAREZ, and Macario CORDEL II*
263WIPP	**The Effect of Stimulus Concurrence on Memorizing Constellations in VR** *Nicko CALUYA, Eiji YAHARA, and Damon CHANDLER*