

Conference Program Monday, 25 November 2024

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Monda	y, 25 November 2024	
09:00	ECW: Early Career Workshop	Doreen Black
to	Session Chair: Chiu-Lin LAI	Box
10:30	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	
	<u>Advisors</u>	
	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	
	W01-1: 4th International Workshop on Embodied Learning: Technology Design, Analytics & Practices Session Chair: Rwitajit MAJUMDAR W01-004F: Exploring Cognitive Engagement in Al-Driven Adaptive Psychomotor Sport Training	The Loft
	Miguel PORTAZ, Rwitajit MAJUMDAR & Olga C. SANTOS W01-005F: Exploring Graph Slopes Through a Series of Embodied Learning Experiences Priyadharshni ELANGAIVENDAN, Melwina ALBUQUERQUE, Shizuka DARA & Sanjay CHANDRASEKHARAN	
	W03-1 : Analysis and Design of Problems/Questions in the Digital Environment: The 17th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions Session Chair: Yusuke HAYASHI	The Hive
	W03-002 : Question Generation Support System Using Others' Research Frames Daiki MAEDA, Kota KUNORI & 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 & Ting-Chia HSU	
	W03-009 : Does Experience of Feedback Generation Promote Student Novel Problem Posing? An Empirical Study in a Database Course Kazuaki KOJIMA	



Monday, 25 November 2024		
09:00 to 10:30	 W08-1: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop) Session Chair: Pawat CHAIPIDECH W08-001F: Novice Programmers' Saccadic Patterns in Error Message Comprehension and Syntax Error Identification Caren PACOL, Maria Mercedes RODRIGO & Christine Lourrine TABLATIN W08-004F: 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 & Sasipim POOMPIMOL W08-005S: 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 & Antuni WIYARSI 	JJ Atencio Lighthouse
	 W09-1: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation Session Chair: Jerry Chih-Yuan SUN W09-001s: AR²: Augmented Reality for Enhanced Reading Comprehension Allan Jay ESTEBAN W09-002s: Developing the Interactive Game-Based Picture Book "Food Ninja" to Enhance Creativity in Elementary School Students Wen Chun LAN, De Jun MO & Joni Tzuchen TANG W09-003F: An Estimation of Student Well-Being Using Experience Sampling Arthur W. NEBRAO, Jr. & Maria Mercedes T. RODRIGO W09-004s: Exploring the Use of Short Video Social Media for Learning ESL in Indonesia Riska SAPUTRA, Tsaqufal JALILIY & Intan SETIANI W09-005s: Narrative Introduction Text Generation Support System According to Reader Preferences Ryusei SHIMONAKA, Kota KUNORI & Tomoko KOJIRI W09-007s: Galvanic Skin Responses and Flow: Insights from Multimodal Learning Analytics in Personal Learning Environment Yu-Lin HO, Yuan-Hsuan LEE & Jiun-Yu WU 	Campos Interactive Teaching Lab
10:30 to 10:50	Coffee / Tea Break Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft



MANILA, PHILIPPINES		
Monda	y, 25 November 2024	
10:50 to 12:20	W01-2: 4th International Workshop on Embodied Learning: Technology Design, Analytics & Practices Session Chair: Jayakrishnan M. WARRIEM W01-006F: Unpacking Interaction Markers of Critical Thinking Aditi KOTHIYAL, Rwitajit MAJUMDAR, Shitanshu MISHRA, Jayakrishnan Madathil WARRIEM & Prajakt PANDE W01-007F: Actions and Interactions at Collaborative Engineering Design Hackathon: Looking Through the Lens of Embodied Cognition Soumya NARAYANAN, Navneet KAUR & 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 & Gautam BISWAS	The Loft
	 W03-2: Analysis and Design of Problems/Questions in the Digital Environment: The 17th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions Session Chair: Shitanshu MISHRA W03-004: Difficulty-Controllable Reading Comprehension Question Generation Considering the Difficulty of Reading Passages Yuto TOMIKAWA & 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 & 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 & Tsukasa HIRASHIMA 	The Hive
	 W08-2: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop) Session Chair: Pawat CHAIPIDECH W08-002F: Predicting Emotional Impact on Peer Review, Peer Assessment, and Self Assessments Using Deep Learning and NLP in STEM Education Pascal Muam MAH W08-008F: Leveraging Generative AI for Automatic Scoring in Chemistry Education: A Web Based Approach to Assessing Conceptual Understanding of Colligative Properties 	JJ Atencio Lighthouse

Sri YAMTINAH, Dimas Gilang RAMADHANI, Antuni WIYARSI, Hayuni Retno

W08-010S: Fostering TPACK Self Efficacy Among Pre-Service Chemistry

Anggiyani Ratnaningtyas Eka NUGRAHENI & Niwat SRISAWASDI

WIDARTI & Ari Syahidul SHIDIQ

Teachers: A Case Study from Indonesia



Monday	y, 25 November 2024	
10:50 to 12:20	 W09-2: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation Session Chair: Tzu-Chi YANG W09-006F: Transforming Student Feedback into Institutional Action Plans: A Data-Driven Approach Arlene Mae CELESTIAL VALDERAMA W09-008F: BioMol DigiGames: An App for the Mastery of Biomolecules Joshua TUMOLVA, Armando Victor GUIDOTE, John Lorence VILLAMIN & Joselito Christian Paulus VILLANUEVA W09-009S: The Era of Learning Programming Through Program: Challenges and Potential of ChatGPT in Revolutionizing High School Programming Education Tzu-Chi YANG W09-010S: Code Visualization System for Writing Better Code Through Trial and Error in Programming Learning: Classroom Implementation and Practice Shintaro MAEDA, Kento KOIKE & Takahito TOMOTO W09-011S: Optimization of Non-Verbal Information for English Conversation Agents Using Interactive Evolutionary Computation Yuma SHIMOSAKA, Emmanuel AYEDOUN & Masataka TOKUMARU 	Campos Interactive Teaching Lab
12:20 to 13:20	Lunch Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft
13:20 to 17:00	IEO1: Interactive Event-1 Educ-AI-tion: Bridging Divides with Educational GenAI Ahmad Salahuddin Mohd Harithuddin, Nurul Amelina NASHARUDDIN, Nur Aira Abd Rahim, & Mas Nida Md Khambari Universiti Putra Malaysia, Malaysia	The Loft
	IEO2: Interactive Event-2 Improving Learning through Information Organization Using Kit-Build Concept Map Rian FITRIANSYAH & Lintang Matahari HASANI Hiroshima University, Japan	Doreen Black Box
	TU01: Tutorial 1 Leveraging Deep NLP for Agentic LLM Use in Teaching and Learning Michelle BANAWAN Asian Institute of Management, Philippines	The Hive



Monday, 25 November 2024		
13:20 to 17:00	 W08-3: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop) Session Chair: Anggiyani Ratnaningtyas Eka NUGRAHENI W08-003F: Math Learning Application on Mobile Devices Following the STEAM Educational Model Nguyen-Manh THANG & Pham-Duc THO W08-011F: Does Interactive Augmented Reality Enhance Primary Students' Geometric Understanding and Visual-Spatial Skills in Mathematics Learning? Atcharaporn ASSAWAPHUM, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH W08-007S: 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, Sri YAMTINAH, Sri MULYANI, Murni RAMLI, Hayuni Retno WIDARTI & Nahadi 	JJ Atencio Lighthouse
	W09-3: The 4th Workshop on Innovative Technologies for Enhancing Interactions and Learning Motivation Session Chair: Yanjie SONG W09-012S: Exploring the Benefits of Strategic Hesitations in Language Learning Robots Ryusei AZUMA, Emmanuel AYEDOUN & Masataka TOKUMARU W09-013S: Zooming In on Educator Well-Being: Exploring Behavior Attributes, Zoom Fatigue, and Burnout Dynamics Kevynn DELGADO, Mary Rose MARTINEZ, Christine Jamela VALSADO & Ryan EBARDO W09-014S: The Effect of Collaborative Anchoring on the Development of Digital Curation Skills Among Nursing College Students Chun-Hao CHANG W09-015F: Enhancing Health Education and Learning Motivation in Primary Students Through Augmented Reality and Game-Based Learning: A Case Study Nattapat BUNYUEN, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH W09-016S: Improving Engagement in Museums Through Virtual Reality Educational Escape Rooms (VREER): A Framework and Usability Study Eric Cesar E. VIDAL Jr., Nicko R. CALUYA, Joan Dominique L. LEE, Kenneth King L. KO, Jed Laszlo O. JOCSON & Gerick Jeremiah Niño N. GO W09-017S: Explore the Effect of Metacognitive Awareness on University Students' Learning Outcomes in the Metaverse: Evidence from Eye-Tracking Data Tinghui WU, Yanjie SONG & Xuesong ZHAI	Campos Interactive Teaching Lab
14:50 to 15:10	Coffee / Tea Break Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft



Monday, 25 November 2024

15:10 to 17:00 **W08-4**: The 12th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)

JJ Atencio Lighthouse

Session Chair: Anggiyani Ratnaningtyas Eka NUGRAHENI

W08-009F: 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 & Deni A. ROKHIM

W08-012F: Exploring the Effect of Marker-Based AR Gamification on Primary Students' Science Concepts and Motivation

Pawat CHAIPIDECH, Sasivimol PREMTHAISONG, Phattaraporn PONDEE & Niwat SRISAWASDI

W08-006S: Exploring the Impact of Digital Divide on the Academic Performance of STEM Students in Hybrid Modality

May Marie P. TALANDRON-FELIPE & Jundy V. INTAO



Tuesday, 26 November 2024

Tuesday, 26 November 2024		
09:00 to 10:30	 W02-1: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024) Session Chair: Ryan EBARDO W02-003F: Exploring Learning Analytics: A Case Study of Tertiary Educators' Utilization and Integration of AnimoSpace LMS in the Online Learning Environment Rozanne Tuesday G. FLORES & Ethel C. 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 & 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 & Joshua TUMOLVA 	Doreen Black Box
	 DSC-1: Doctoral Student Consortium Session Chair: Feng LIN 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 & Yanjie SONG 223: Competition and Collaboration: A Multi-Modal Analysis of Cognitive Load and Behavior Patterns in Game-Based Learning Lishan ZHENG & Wenli CHEN 	The Loft
	W04-1: The 8th Computer-Supported Personalized and Collaborative Learning Session Chair: Cheng-Huan CHEN W04-007F: 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 & Tak-Wai CHAN W04-008F: Investigating Students' Online Learning Perception Through the Lens of Constructivism May Marie P. TALANDRON-FELIPE, Kent Levi A. BONIFACIO & Gladys S. AYUNAR W04-001S: Integrating Virtual Environment in Teaching Courses Chiu-Jung CHEN & Pei-Lin LIU	The Hive



Tuesdo	y, 26 November 2024	
09:00 to 10:30	W06-1: GenAl in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences Session Chair: Yiling DAI W06-001F: Analyzing Teacher-Student Dialogues in Online One-on-One Primary Mathematics Tutoring: A Lag Sequential Analysis of Group Differences Gary CHENG, Bo JIANG, Daner SUN, Ming GAO & Zhixuan SONG W06-004F: Supporting Teacher-Student Book Talk and Book Wish Lists with Al-Driven Technology Chih-En KUO, Hong-Min TU, Chang-Yen LIAO & Tak-Wai CHAN W06-005F: AVERY: A GenAl-Based Approach to Enhancing Learner Engagement in English Writing Ka-Lai WONG, Patrick OCHEJA, Brendan FLANAGAN & Hiroaki OGATA	JJ Atencio Lighthouse
	 W07-1: The 7th Workshop on Predicting Performance Based on the Analysis of Reading and Learning Behavior W07-001F: Exploring Cross-Disciplinary Education: Enhancing Science Learning with Digital Picture Books <i>Yan-Yu JAU & Joni Tzuchen TANG</i> W07-002F: Methods of Balancing Model Explainability and Performance in Identifying At-Risk Students <i>Tiffany T.Y. HSU, Brendan FLANAGAN & Owen H.T. LU</i> 	Campos Interactive Teaching Lab
10:30 to 10:50	Coffee / Tea Break Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft
10:50 to 12:20	 W02-2: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024) Session Chair: Ryan EBARDO 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 & Saiful Hasley RAMLI W02-017F: Factors Influencing ChatGPT Use Behaviour Among Trainee Teachers Sarala VALAIDUM & Jazihan MAHAT W02-009S: Design and Implementation of an Educational Escape Rooms Class 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 & Maria Mercedes T. RODRIGO 	Doreen Black Box



Tuesda	y, 26 November 2024	
10:50 to 12:20	 DSC-2: Doctoral Student Consortium Session Chair: Alwyn Vwen Yen LEE 253: A Proposal for a Quantitative Evaluation Model for Error Image Generation in L2 Vocabulary Learning Kazuki SUGITA, Wen GU, Koichi OTA, Prarinya SIRITANAWAN & 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 & Mohd Zariat Abdul Rani 217: OKLM: Open Knowledge and Learner Model Using Educational Big Data Kensuke TAKII, Changhao LIANG & Hiroaki OGATA 	The Loft
	W04-2: The 8th Computer-Supported Personalized and Collaborative Learning Session Chair: Chin-Jung CHEN W04-013F: 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 & Toshihiro HAYASHI W04-002S: The Trends in Computer-Supported Virtual Reality Collaborative Learning Ching-Yi CHANG & Cheng-Huan CHEN W04-003F: 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 & Joni Tzuchen TANG	The Hive
	W06-2: GenAl in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences Session Chair: Patrick OCHEJA Panel Discussion	JJ Atencio Lighthouse
	 W07-2: The 7th Workshop on Predicting Performance Based on the Analysis of Reading and Learning Behavior W07-003F: Effects of the Self-Regulated Learning and Motivation on Learning Achievements of the Programming Courses Mu-Sheng CHEN & Ting-Chia HSU W07-004F: GazeViz: A Web-Based Approach for Visualizing Learner Gaze Patterns in Online Educational Environment Eduardo DAVALOS, Namrata SRIVASTAVA, Yike ZHANG, Amanda GOODWIN & Gautam BISWAS 	Campos Interactive Teaching Lab
12:20 to 13:20	Lunch Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft



Tuesday, 26 November 2024

13:20	W02-3 : The 13th International Workshop on ICT Trends in Emerging	Doreen Black
to	Economies (WICTTEE 2024)	Box
14:50	Session Chair: John Byron TUAZON	
	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 &	
	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 & Saturnina F. NISPEROS	
	W02-016S : Sociotechnical Challenges of Older Educators in Delivering Medical Education Online	
	Ryan EBARDO, John Byron TUAZON & Miriam Louella FERMIN	
	Ryan Ebarbo, John Byron Toazon & Minam Lodella Lermin	
	DSC-3 : Doctoral Student Consortium	The Loft
	Session Chair: Feng LIN	
	248 : Exploring the Young Learners' Interactions with Al-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 & Ethel ONG	
	Discussion	
	W04-3 : The 8th Computer-Supported Personalized and Collaborative	The Hive
	Learning	
	Session Chair: Jonathan Y. CHIN	
	W04-012F : Addressing Public Speaking Anxiety with an Al Speech Coach	
	Frederick Voltair GARCIA Jr., Nicanor Froilan PASCUAL,	
	Miguel Elijah SYBINGCO & Ethel ONG	
	W04-005S : 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 & Chia-Jung CHANG	
	W04-010S : Developing an LLM-Empowered Agent to Enhance Student	
	Collaborative Learning Through Group Discussion	
	Sixu AN, Yicong LI, Yu YANG, Yunsi MA, Gary CHENG & Guandong XU	



Tuesday, 26 November 2024		
13:20 to 14:50	 W06-3: GenAl in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences Session Chair: Tzu-Chi YANG W06-007F: How Al Supports Returning Adult Learners in a Developing Economy: Enhancing Academic Writing Through Self-Determination Theory Mary Rose MARTINEZ & Ryan EBARDO W06-009F: Developing a Multimodal Learning Analytics Approach to Examine Students' Cognitive Presence and Metacognition in a Metaverse Environment Yanjie SONG, Lei TAO, Hao DENG & Jiachen FU W06-010F: Integrating ChatGPT into Flipped Learning: Enhancing Students' Creative Writing Skills and Perception Worapong KHUIBUT, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH 	JJ Atencio Lighthouse
13:20 to 17:00	SW: Student Wing Chair: Yanjie SONG, The Education University of Hong Kong Introduction Topic: Get Your Research Published: Essential Tools and Strategies Yin YANG, The Education University of Hong Kong Q&A Session Topic: Unlock Your Early Career Success: Tips and Opportunities for Securing Grants Shurui BAI, The Education University of Hong Kong Q&A Session Interactive Session Closing	Campos Interactive Teaching Lab
	TU02: Tutorial 2 Designing Learning Experiences for Science, Technology, Engineering and Mathematics (STEM) Education using Minecraft Dominique Marie Antoinette MANAHAN & Louise Marie TULAYBA Ateneo de Manila University, Philippines	Assemble at Ubuntu Space
14:50 to 15:10	Coffee / Tea Break Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft



Tuesda	y, 26 November 2024	
15:10 to 17:00	W02-4: The 13th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2024) Session Chair: Ryan EBARDO W02-013S: Minecraft as a Tool for Digital Game-Based Learning: Enhancing Conceptual Understanding and Attitudes in Mathematics Learning Sakda CHALEEPLIAM, Sasivimol PREMTHAISONG & Pawat CHAIPIDECH W02-008S: Cognicraft: Smart Exam Question Generation with Al and Bloom's Taxonomy Christian SAGADRACA, Zainal SANTOS, Danilo SIMON Jr., Marianne Jessica TOLENTINO & Reymar VENTURA W02-004S: Development and Evaluation of a Hybrid Mobile-Learning App Using Design Science Research (DSR) Framework John Lorence VILLAMIN, Joselito Christian Paulus VILLANUEVA & Joshua TUMOLVA	Doreen Black Box
	DSC: Doctoral Student Consortium Discussion	The Loft
	W04-4: The 8th Computer-Supported Personalized and Collaborative Learning Session Chair: Chia-Jung CHANG W04-006S: Exploring the Effect of Collaborative Programming Learning Environment on Student's Computer Programming Competencies and Cognitive Learning Chia-Jung CHANG & Wen-Lung HUANG W04-009S: Investigating the Impact of Kahoot! On EFL Grammar Learning Jonathan Y. CHIN & Ben CHANG W04-011S: Designing an LLM-Based Dialogue Tutoring System for Novice Programming Julieto PEREZ & Ethel ONG	The Hive
	 W06-4: GenAl in Education - From Hallucinations to Reality: Integrating Learning Analytics and Generative Al for Enhancing Personalized Learning Experiences Session Chair: Owen LU W06-011F: Competency-Based Assessment in the Era of Generative Artificial Intelligence: Perspectives of Selected STEM Educators Friday Joseph AGBO, Heather Kitada SMALLEY & Kathryn NYMAN W06-006S: A Case Study for Educators with ChatGPT and Plato's Allegory of the Cave Anna Y.Q. HUANG, Jain-Wei TZENG, Chi-Sheng HUANG, Zhi-Qi LIU, Bryan Carl TANUJAYA & Owen H.Q. LU W06-008S: Supporting Students' Post-Exam Reflection Needs in College Automation Engineering Course Using LLM Edward ANOLIEFO, Patrick OCHEJA, Regina OCHONU, Brendan FLANAGAN & Hiroaki OGATA 	JJ Atencio Lighthouse
17:00 to 19:30	Welcome Reception	Ubuntu Space



Wednesday, 27 November 2024

C1: AIED/ITS C2: CSCL C3: ALT C4: TEML

C5: EGG C6: TELL C7: PTP

BOPN Best Overall Paper Award Nominee
BSPN Best Student Paper Award Nominee

BTDPN Best Technical Design Paper Award Nominee

F Full Paper (20 minutes presentation + 5 minutes Q&A)
 S Short Paper (10 minutes presentation + 5 minutes Q&A)

ES Extended Summary (9 minutes presentation + 5 minutes Q&A)

ES	Extended Summary (9 minutes presentation + 5 minutes Q&A)			
Wedne	Wednesday, 27 November 2024			
09:00 to 10:00	Opening Ceremony	Hyundai Hall		
10:00 to 10:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space		
10:20 to 11:20	Keynote Speech: Dragan GAŠEVIĆ Getting Ready for the Age of Al: Developing Self-Regulated Learners Session Chair: Jon MASON	Hyundai Hall		
11:20 to 12:20	Panel-3 Learning Languages in "Smarter" Ways: Theory-Informed Utilization of Smart Technologies in Contextualized, Authentic & Communicative Language Learning Lung-Hsiang WONG, Yun WEN, Vivian Wen-Chi WU, Yoshiko GODA & Ting-Chia HSU	Hyundai Hall		
	ALT-1 Session Chair: Shinobu HASEGAWA 64F: Proficiency Modeling in Junior High Math: Adapted Cognitive Statistical Models to E-Book Learning Contexts Changhao LIANG, Kensuke TAKII & 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 & Gwo-Dong CHEN	Doreen Black Box		
	TEML-1 Session Chair: Ivica BOTICKI 71F BSPN: Linking Real-World Experiences with Course Contents: A Text Mining Approach Toward Effective "There and Back Again" Manabu ISHIHARA, Izumi HORIKOSHI & 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 & Gwo-Dong CHEN	The Loft		



Wedne	Wednesday, 27 November 2024		
11:20 to 12:20	AIED/ITS-1 Session Chair: Brendan FLANAGAN 58F BSPN: The Impact of Instructional Videos Supported by AI-Driven Tutoring System on EFL Listening and Speaking Xiangyu TAN & Xiuyuan ZUO 137F: LLM-Generated Personalized Analogies to Foster AI Literacy in Adult Novices Cassie Chen CAO, Eason CHEN, Zoe FANG, Lydia Y CAO, Jionghao LIN & Ruizhe LI	The Hive	
	PTP-1 Session Chair: Sahana MURTHY 24F: Do Academic Stress and Risk Propensity Affect Behavioral Intention to Use ChatGPT Among University Students? Brylle SAMSON, Ronnie LURIAGA & Ryan EBARDO 53F: Who Is a Good Computational Thinker? Mapping Behavioral Dispositions of Middle-School Children Based on Real-Life, Algorithmic Tasks Shashaank V. PINNAMARAJU, Lazar TONY & Anveshna SRIVASTAVA	JJ Atencio Lighthouse	
	International Program Committee (IPC) Meeting (open meeting) All program committee members are welcome to attend this meeting	Campos Interactive Teaching Lab	
12:20 to 13:20	Lunch Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space	
13:20 to 14:00	Theme-Based Invited Speech Session Chair: Yun WEN How to Better Understand the Collaborative Component in Computer-Supported Collaborative Learning (CSCL): Current Landscape, Challenges and Future Prospects Johanna PÖYSÄ-TARHONEN	Hyundai Hall	
14:00 to 15:00	ALT-2 Session Chair: Shinobu HASEGAWA 196F BOPN: Combining Multimodal Analyses of Students' Emotional and Cognitive States to Understand Their Learning Behaviors Ashwin T S, Caitlin SNYDER, Celestine E. AKPANOKO, Srigowri M P & Gautam BISWAS 136S: Development of Metacognitive Reflection Support System on Creative Discussion Toshimasa SHIMIZU, Yuki HAYASHI & Kazuhisa SETA 149S: Utilization of Japanese Public Educational Data by Retrieval Augmented Generation for Policy Research Kyosuke TAKAMI	Doreen Black Box	
	Meet the APSCE Executive Committee	The Loft	



Wedne	sday, 27 November 2024	
14:00 to 15:00	AIED/ITS-2 Session Chair: Maria Mercedes T. RODRIGO 13S: UniSpLLM: An Integrated Approach for Enhancing Reasoning and Education with Large Language Models Hanyu ZHAO, Yuzhuo WU, Yang YU, Xiaohua YU & Liangyu CHEN 106S: Availability and Effectiveness of Generative AI for Web-Based Investigative Learning Yutaka WATANABE & 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 & Siu Cheung KONG	The Hive
	TELL-1 Session Chair: Brendan FLANAGAN 123F BSPN: TAMMY: Supporting EFL Translation Practice with an LLM-Powered Chatbot Steve WOOLLASTON, Brendan FLANAGAN, Patrick OCHEJA, Yiling DAI & 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 & Alex Wing Cheung TSE	JJ Atencio Lighthouse
	CSCL-1 Session Chair: Cheng-Huan CHEN 31F: Unveiling the Interplay of Students' Epistemic Emotions and Knowledge Building Activities in Design Studios Alwyn Vwen Yen LEE, Chew Lee TEO, Aloysius ONG & Katherine YUAN 144F BOPN, BSPN: MESHing Minds: Bridging the Gap Between Creativity and IoT Programming Through Collaborative Mixed Reality Yusuke SAKABE, Emmanuel AYEDOUN & Masataka TOKUMARU	Campos Interactive Teaching Lab
15:00 to 15:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
15:20 to 16:50	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	Hyundai Hall



/edne	sday, 27 November 2024	
15:20 to 16:50	Session Chair: Shinobu HASEGAWA 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 & Tsukasa HIRASHIMA 113F: Comparison of Learners' Self-Direction Behavior Across Contexts and Phases Junya ATAKE, Chia-Yu HSU, Huiyong LI, Izumi HORIKOSHI, Rwitajit MAJUMDAR & 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 & Ting-Chia HSU 143S: Forest/CR: Critical Paper Reading Support System Tomoya KII, Kazuhisa SETA & Yuki HAYASHI	Doreen Black Box
	 EGG-1 Session Chair: Shurui BAI 72F: Comparing Effects of Adaptive Gamification and One-Size-Fits-All Gamification on Students' Task Completion Process and Learning Performance Shurui BAI & Yingxue LIU 162F BOPN: Dialogue Game-Based Learning for AI Ethics Education Hyo-Jeong SO & Sung-Eun KIM 125S: Detecting Off-Task Behavior of Learners in Minecraft Using Exploration and Personalized Features Maricel A. ESCLAMADO & Maria Mercedes T. RODRIGO 	The Loft
	Session Chair: May Marie TALANDRON-FELIPE 175F: Evaluating the Performance of Copula-Based Item Response Theory Models for Interpretable Assessment Eduardo GUZMÁN & Eva MILLÁN 80S: Enhancing Diversity in Difficulty-Controllable Question Generation for Reading Comprehension via Extended T5 Teruyoshi GOTO, Yuto TOMIKAWA & 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, Yu-Cheng LIN & Chi-Heng LI 266ES: Exploring Dialogue Patterns in Argumentation with Pre-Set ChatGPT Personas Seunmin EUN & Seonmin JIN	The Hive



Wedne	sday, 27 November 2024	
15:20	PTP-2	JJ Atencio
to	Session Chair: Jayakrishnan WARRIEM	Lighthouse
16:50	61F BOPN : Representing Learning Progression of Unguided Exercise Solving: A Generalization of Wheel-Spinning Detection	
	Taisei YAMAUCHI, H. Ulrich HOPPE, Yiling DAI, Brendan FLANAGAN & Hiroaki OGATA	
	6S : Factors Contributing to the Negative Online Learning Academic Self-Concept of College Students	
	Rex BRINGULA, Roman Paulo BAET, Ralph Lawrence GARCIA,	
	Franchesca Mari MORALES, Jan Carlo RAMOS, Hanna Sophia SARMIENTO & Edmon TORRES	
	75 : Teachers' Perspectives on Integrating AI Tools in Classrooms: Insights from the Philippines	
	Vanessa B. SIBUG, Vicky P. VITAL, John Paul P. MIRANDA,	
	Emerson Q. FERNANDO, Almer B. GAMBOA, Hilene E. HERNANDEZ,	
	Joseph Alexander BANSIL, Elmer M. PENECILLA & Dina D. GONZALES	
	10S : Research on the Dual-Pathway Impact of Artificial Intelligence Technology on Teachers' Human-Machine Collaboration	
	Yujie XU & 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 & Sai Hong TANG	
	SIG 2 Community Building (CB) Session	Campos
	Computer-Supported Collaborative Learning and Learning Sciences (CSCL)	Interactive Teaching Lab
	Chair: Lenka SCHNAUBERT, University of Nottingham, United Kingdom	_
16:50	Poster Session 1	Innovation
to	Posters	Lobby
17:50	Work-in-Progress Posters (WIPP) SATELUC	(2nd Floor)
18:00	APSCE Executive Committee (EC) Meeting	
to	(closed meeting)	
22:00		



Thursday, 28 November 2024

C1: AIED/ITS C2: CSCL C3: ALT C4: TEML

C5: EGG C6: TELL C7: PTP

BOPN Best Overall Paper Award Nominee
BSPN Best Student Paper Award Nominee

BTDPN Best Technical Design Paper Award Nominee

F Full Paper (20 minutes presentation + 5 minutes Q&A)S Short Paper (10 minutes presentation + 5 minutes Q&A)

ES Extended Summary (9 minutes presentation + 5 minutes Q&A)

	Externation currently (o trimated proportion of trimated query)	
Thursd	lay, 28 November 2024	
09:00 to 10:00	Keynote Speech: Mirjam HAUCK Critical Virtual Exchange for Critical Global Citizenship Education Session Chair: Yanjie SONG	Hyundai Hall
10:00 to 10:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
10:20 to 11:00	Theme-Based Invited Speech: Ching Sing CHAI In Search of Intelligent Pedagogical Content Knowledge (IPACK) Session Chair: Rwitajit MAJUMDAR	Hyundai Hall
	Theme-Based Invited Speech: Wenli CHEN Multi-Modal Learning Analytics for Learning Design Session Chair: Ivica BOTICKI	Doreen Black Box
11:00 to 12:00	Panel-1 Digital Technology for Inclusive and Equitable Quality Education Weiqin CHEN, Jon MASON, Faisal BADAR, Shitanshu MISHRA & Maria Mercedes T. RODRIGO	Hyundai Hall
	 ALT-4 Session Chair: Yilling DAI 4S: Exploring the Relationship of Personality Domains and Visual Attention Patterns in Novice Programmers Caren PACOL, Maria Mercedes RODRIGO & Christine Lourrine TABLATIN 35S: Construction of a Japanese Language Learning Support System That Enables Word Accent Learning Satoru KOGURE, Kazuki TOMITA, Yasuhiro NOGUCHI, Koichi YAMASHITA, Tatsuhiro KONISHI & Makoto KONDO 41S: Developing a Feedback Analytic Tool to Support Instructor Reflection Feng LIN, Chenchen LI, Rebekah Wei Ying LIM & Yew Haur 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 & Tsukasa HIRASHIMA 	Doreen Black Box



Thursd	ay, 28 November 2024	
11:00 to 12:00	AIED/ITS-4 Session Chair: Michelle BANAWAN 94F BOPN: Predicting and Analyzing Students' Higher-Order Questions in Collaborative Problem-Solving Shan ZHANG, Toni V. EARLE-RANDELL, Qian SHEN, Anthony F. BOTELHO, Maya ISRAEL, Kristy Elizabeth BOYER, Collin F. LYNCH & Eric WIEBE 120F BTDPN: Reflection Support System with Audience Robots for Presentation Practice Yuya KISHIMOTO & Tomoko KOJIRI	The Loft
	TEML-2 Session Chair: Changhao LIANG 132F: Classifying Self-Reflection Notes: Automation Approaches for GOAL System	The Hive
	Session Chair: Mas Nida MD KHAMBARI 19S: Using a Teaching Framework to Identify Resilient and Persistent Teaching Practices During the Pandemic Ma. Monica L. MORENO, Johanna Marion R. TORRES, Timothy Jireh GASPAR, Jenilyn A. CASANO & Maria Mercedes T. 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 & 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 & Sahana MURTHY 155S: Appropriating Al-Powered Pedagogical Affordances for Vocabulary Learning Xinyu GUO & Yun WEN	JJ Atencio Lighthouse
12:00 to 13:00	Lunch Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
13:00 to 14:00	Keynote Speech: Michelle BANAWAN Learning from Generative AI for Cognitive and Pedagogical Advancement	Hyundai Hall

Session Chair: Maria Mercedes RODRIGO



	MANILA, PHILIPPINES	
Thursdo	ay, 28 November 2024	
14:00 to 15:30	ALT-5 Session Chair: Banni Satria ANDOKO 48F BTDPN: Designing Recommendations for Productive Learning Habit-Building from Learning Logs Chia-Yu HSU, Izumi HORIKOSHI, Huiyong LI, Rwitajit MAJUMDAR & Hiroaki OGATA	Doreen Black Box
	 101F: Designing Interaction Scenario for Alleviating Persistence in Learning Strategies So SASAKI & 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 & Gwo-Dong CHEN 145S: Facilitating Thinking like a Historian in Open-Ended Learning Space: A White Box Approach Aoi MATSUURA, Yuki HAYASHI & Kazuhisa SETA 	
	CSCL-2 Session Chair: Ben CHANG 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 & Zirou LIN 88S: Enhancing Social Learning in Active Video Watching Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Jay HOLLAND & Negar MOHAMMADHASSAN 124S: Rethinking Trust in Human-Al Collaboration in the Generative Al Era Yijie LU & Bo JIANG 147S: Infrastructuring for Collective Cognitive Responsibility: A Case Study of Student Knowledge Building Design Studio Chew Lee TEO, Aloysius ONG, Alwyn LEE, Guangji YUAN & Kennedy LOO 148S: Review of Different Assessment Methods Used by Online Inquiry-Based Learning Systems That Support Argumentation Nitesh Kumar JHA, Plaban Kumar BHOWMIK & Kaushal Kumar BHAGAT 200S: Investigating Secondary School Students' Academic Emotions in Data Science Learning Gaoxia ZHU, Chew Lee TEO, Guangji YUAN, Chin Lee KER, Aloysius ONG & Alwyn Vwen Yen LEE	The Loft
	EGG-2 Session Chair: Jie-Chi YANG 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 & Kuen Fung SIN 103F: Exploring the Impact of Incorporating Digital Escape Room on Learners' Performance and Motivation in Environmental Sustainability Education Yu-Chao LAI & Jie-Chi YANG 133S: Middle School Students' Ability to Detect Lies When Interacting with	The Hive

an Educational Al Robot

Ahmed SALEM & Kaoru SUMI



Thurso	lay, 28 November 2024	
14:00 to 15:30	PTP-4 Session Chair: Shitanshu MISHRA 114F BTDPN: Extraction of Important Characteristics for Data-Informed Guidance and Counseling from Daily Usage Log Data Junya ATAKE, Chia-Yu HSU, Izumi HORIKOSHI & Hiroaki OGATA 146F: Driving Informed EdTech Quality Decisionmaking: A Research-Practice Partnership-Based Solution for Diverse Stakeholders' Needs Ishika ISHIKA, Angelina Susan PHILIP, Sheeja VASUDEVAN & Sahana MURTHY 20S: Determinants of ChatGPT Adoption in Academe & Other Fields – A Review on Theoretical Perspective Gerand Boy O. ELINZANO & Michelle Renee CHING 171S: Exploring the Entanglement Between Technology and Pedagogy: A Case Study of Knowledge Building Yee Yin TAN, Seng Chee TAN & Chew Lee TEO	JJ Atencio Lighthouse
	SIG 9 Community Building (CB) Session Educational Use of Problems/Questions in Technology-Enhanced Learning (EUPQ) Chair: Shitanshu MISHRA, Indian Institute of Technology Bombay, India	Campos Interactive Teaching Lab
15:30 to 15:50	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
15:50 to 16:50	 ALT-6 Session Chair: Shinobu HASEGAWA 915: Boosting Course Recommendation Explainability: A Knowledge Entity Aware Model Using Deep Learning <i>Tianyuan YANG, Baofeng REN, Boxuan MA, Tianjia HE, Chenghao GU & Shin'ichi KONOMI</i> 1915: Error Tolerance in Automatic Short Answer Grading with Large Language Models: The Case of Handwriting Recognition Errors <i>Ziqi TAN, Yingbin ZHANG & Su MU</i> 209ES: Identifying Key Indicators of Proficiency in Junior High Math: Roles of Daily Handwriting Learning Logs <i>Yudai OKAYAMA, Changhao LIANG, Kensuke TAKII & Hiroaki OGATA</i> 267ES: Relationship Analysis Between Procrastination Behavior and Non-Cognitive Abilities <i>Yasuhisa TAMURA & Keito MORINO</i> 	Doreen Black Box



ay, 28 November 2024	
AIED/ITS-5 Session Chair: Rwitajit MAJUMDAR 151F: Facilitating Holistic Evaluations with LLMs: Insights from Scenario-Based Experiments Toru ISHIDA, Tongxi LIU, Hailong WANG & William K. 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 & Hajime NAGAHARA 211ES: Integrating Explanations in Active Video Watching Raul Vincent LUMAPAS, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Pasan PEIRIS & Jay HOLLAND	The Loft
 TELL-2 Session Chair: Yanjie SONG 158F BOPN: Open Knowledge and Learner Model: Mathematical Representation and Applications as Learning Support Foundation in EFL Kensuke TAKII, Changhao LIANG & 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 & Jerry Chih-Yuan SUN 112S: Examining Augmented Reality's Influence on Pronunciation Training: Insights from PinyinGuo's Application and Comparative Avatar Testing Daria SINYAGOVSKAYA 	The Hive
 PTP-5 Session Chair: Aditi KOTHIYAL 95\$: Determinants of ICT Competency Among Public School Teachers in Bukidnon Gladys S. AYUNAR, Nathalie Joy G. CASILDO, May Marie P. TALANDRON-FELIPE, Kent Levi A. BONIFACIO, Jinky G. MARCELO & Fe S. 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 & Nur Aira ABDRAHIM 228ES: Analysis of Factors Influencing Teacher Behavioural Engagement in Distance Training Based on MOA and SDT Zhou JIN 	JJ Atencio Lighthouse
	AIED/ITS-5 Session Chair: Rwitajit MAJUMDAR 151F: Facilitating Holistic Evaluations with LLMs: Insights from Scenario-Based Experiments Toru ISHIDA, Tongxi LIU, Hailong WANG & William K. 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 & Hajime NAGAHARA 211ES: Integrating Explanations in Active Video Watching Raul Vincent LUMAPAS, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN, Pasan PEIRIS & Jay HOLLAND TELL-2 Session Chair: Yanjie SONG 158F BOPN: Open Knowledge and Learner Model: Mathematical Representation and Applications as Learning Support Foundation in EFL Kensuke TAKII, Changhao LIANG & 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 & Jerry Chih-Yuan SUN 112S: Examining Augmented Reality's Influence on Pronunciation Training: Insights from PinyinGuo's Application and Comparative Avatar Testing Daria SINYAGOVSKAYA PTP-5 Session Chair: Aditi KOTHIYAL 95S: Determinants of ICT Competency Among Public School Teachers in Bukidnon Gladys S. AYUNAR, Nathalie Joy G. CASILDO, May Marie P. TALANDRON-FELIPE, Kent Levi A. BONIFACIO, Jinky G. MARCELO & Fe S. 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 & Nur Aira ABDRAHIM 228ES: Analysis of Factors Influencing Teacher Behavioural Engagement in Distance Training Based on MOA and SDT

257ES: The Impact of AI Literacy on Teacher Efficacy and Identity: A Study

of Korean English Teachers Seunmin EUN & Anna KIM



Thursd	Thursday, 28 November 2024			
16:50 to 17:50	SIG 6 Community Building (CB) Session Technology Enhanced Language Learning (TELL) Chair: Yanjie SONG, The Education University of Hong Kong, Hong Kong	JJ Atencio Lighthouse		
	Poster Session 2 Posters Work-in-Progress Posters (WIPP) SATELUC	Innovation Lobby (2nd Floor)		
18:30 to 21:30	Conference Banquet	Leong Hall Roof Deck		



Friday, 29 November 2024

C1: AIED/ITS C2: CSCL C3: ALT C4: TEML

C5: EGG C6: TELL C7: PTP

BOPN Best Overall Paper Award Nominee
BSPN Best Student Paper Award Nominee

BTDPN Best Technical Design Paper Award Nominee

F Full Paper (20 minutes presentation + 5 minutes Q&A)
S Short Paper (10 minutes presentation + 5 minutes Q&A)

ES Extended Summary (9 minutes presentation + 5 minutes Q&A)

LO	Exterided 3diffillary (3 fillilates presentation + 3 fillilates QQA)	
Friday,	29 November 2024	
09:00 to 10:00	Keynote Speech: Seiji ISOTANI Personalized Gamification Experiences: From Design to Impact Session Chair: Bo JIANG	Hyundai Hall
10:00 to 10:20	Coffee / Tea Break Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	The Loft & Ubuntu Space
10:20 to 12:00	Session Chair: Huiyong LI 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 & Yusuke HAYASHI 77F BSPN: Automated Recommendations for Revising Lecture Slides Using Reading Activity Data Erwin D. LOPEZ Z, Cheng TANG, Yuta TANIGUCHI, Fumiya OKUBO & Atsushi SHIMADA 40S: Optimizing Causal Inference Approach for Exploring Shallow Reading Behavior with Generative Adversarial Networks Yu BAI, Fuzheng ZHAO, Wenhao WANG & Chengjiu YIN 60S: Exploring Linguistic Sophistication of Discussion Board Posts in University Learning Management Systems Michelle P. BANAWAN, Clarence James MONTEROZO & Maria Mercedes T. RODRIGO 227ES: Toward Contextualized Handwriting Process Analysis: Comparison Between Problem Types in Math Shunsuke TONOSAKI, Taito KANO, Satomi HAMADA, Izumi HORIKOSHI & Hiroaki OGATA	Doreen Black Box



Friday,	iday, 29 November 2024		
10:20 to 12:00	TEML-3/4 Session Chair: Sasipim POOMPIMOL 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 & Gwo-Jen HWANG 160S: Participatory Design of an Al Digital Textbook with Deaf and Hard-of-Hearing Students Ga Young LEE, Jieun CHOI, Seonhee NA & Hyo-Jeong SO 161S: Technology Considerations in Building Virtual Educational Avatars Antun DROBNJAK & Ivica BOTICKI 194S: Data-Driven Peer Recommendation and Its Applications in Extracurricular Learning Peixuan JIANG, Changhao LIANG & Hiroaki OGATA	The Loft	
10:20 to 11:10	AIED/ITS-6 Session Chair: Riichiro MIZOGUCHI 238ES: Personalized Comment Reviewing in Active Video Watching: Investigation of Learners' Cognitive Load Ehsan BOJNORDI, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN & Jay HOLLAND 251ES: AI-Driven Feedback for Enhancing Students' Mathematical Problem-Solving: The ScaffoldiaMyMaths System Daner SUN, Jingyun WANG, Lan YANG, Kee-lee CHOU, Zhixuan SONG & Zhizi ZHENG 259ES: A Study on High School Students' Continuance Intention to Use ChatGPT for Learning Assistance: An Exploration Based on Self-Determination Theory Chien-Liang LIN, Tian-Yun LIN, Shi-En LIN & Yu-Chen LIN	The Hive	
	CSCL-3 Session Chair: Gaoxia ZHU 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 & 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 & Qianru LYU	JJ Atencio Lighthouse	



Friday	7, 29 November 2024	
11:10 to 12:00	TELL-3 Session Chair: Daria SINYAGOVSKAYA 1155: 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 & Thepchai SUPNITHI 1285: Investigation on the Usage Status of a Support System for Writing English Paragraph Outlines in English Classes Afifah ILHAM, Tomohiro KUROKI, Akira NAKANO & Hidenobu KUNICHIKA 1525: Mapping Morphological Patterns: A Framework for Rinconada Bikol Language Morphological Analysis and Stemming Tiffany Lyn PANDES & Joshua MARTINEZ PTP-6 Session Chair: Arlene VALDERAMA 183F: Constructing Desirable Learning Habits: Evidence from an	The Hive JJ Atencio Lighthouse
12:00	Instructional System Design Course Based on the IDC Theory Anveshna SRIVASTAVA, Sandeep YADAV, Sahana MURTHY & Sridhar IYER 188F BSPN: The Impact of Using an Online Collaborative Platform in Blended Learning on Postsecondary Vocational School Year One Students' Self-Regulated Learning Abilities: A Quasi-Experimental Research Siyou WU & Alex Wing Cheung TSE Lunch	The Loft &
to 13:00	Food Service Station & Dining Area: Ubuntu Space Food Service Station: The Loft Dining Area: The Loft, The Hive, JJ Atencio Lighthouse	Ubuntu Space
13:00 to 14:00	 Session Chair: Anveshna SRIVASTAVA 95: Code Tracing Support Environment Based on Visualization of Cooperative Behavior of Multiple-Flows Yasuhiro NOGUCHI, Kotaro SUNAMA, Satoru KOGURE, Raiya YAMAMOTO, Koichi YAMASHITA & Tatsuhiro KONISHI 905: Peer Feedback Feature Analysis with Large Language Models: An Exploratory Study Qianru LYU, Zirou LIN & Wenli CHEN 214ES: Relationship Between Students' Scores in Weekly Tests and Final Exam Satomi HAMADA, Izumi HORIKOSHI & Hiroaki OGATA 218ES: Exploring Reading Speed Profiles in EFL Extensive Reading Hatsune ICHIDATE, Yiling DAI, Brendan FLANAGAN & Hiroaki OGATA 	Doreen Black Box



Friday, 29 November 2024			
13:00	TELL-4	The Loft	
to	Session Chair: Leung Ho Philip YU		
14:00	14S : Enhancing Chinese Language Education Through Al-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 & Jun Rangie OBISPO		
	186S : Enhancing Language Learning Through Multimodal Al-Driven		
	Feedback on Picture Descriptions: An Eye-Tracking Study		
	Ruibin ZHAO, Zhiwei XIE, Yipeng ZHUANG, Huixian LI, Philip L. H. YU		
	EGG-3	The Hive	
	Session Chair: Ming-Chi LIU		
	73S : FLOU: Evaluating the Intrinsic Motivation of Learners in Gamifying Aca-		
	demic Programs Through a Gamified Mobile Application		
	Marl Vincent AGRAVANTE, Jeru Kian FERNANDEZ, Ma. Louisa PEREZ & Joshua MARTINEZ		
	164S : Designing an Educational Game for Facilitating Development of Media and Information Literacy		
	Jun XIE, Xiang LI, Kotomi HASEGAWA, Zhichun LIU & Frank REICHERT		
	262ES : Developing a Visualized Data Guessing Game to Assess Data		
	Literacy		
	Ruei-Yi XIE & Ming-Chi LIU		
14:15	Closing Ceremony	Hyundai Hall	
14.15			
to			



Wednesday, 27 November 2024, 16:50-17:50

C1: 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 & Joshua MARTINEZ

54P: Authorship Forensics Portal

Robert SCHMIDT, Maiga CHANG, Hsiang-Han CHENG, Greg FREDIN, Kevin HAGHIGHAT & Rita KUO

55P: Designing Learner-Centered Collaborative Learning by Incorporating Al-Based Teacher/ Learner Agents with a Cognitive Model

Yugo HAYASHI, Shigen SHIMOJO & Tatsuyuki KAWAMURA

59P: Student Perceptions of Using Generative AI Chatbot in Learning Programming Ean Teng KHOR, Leta CHAN, Elizabeth KOH & Peter SEOW

C3: 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 & Rex BRINGULA

32P: Early Detection of At-Risk Students Through Leaning-Activity Forecasting Yuya OZAKI, Daisuke DEGUCHI, Haruya KYUTOKU & Hiroshi MURASE

165P: What Insights Are Gained from Students' Trace Data in Homework?

Satomi HAMADA, Yuko TOYOKAWA, Taito KANO, Izumi HORIKOSHI & Hiroaki OGATA

C4: TEML

36P: A TPB-TAM Approach to Identifying Adoption Factors of Hyflex Among Educators Elanie VIZCONDE, Joshua ISAGUIRRE, Gabriel Luis LIWANAG & 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 & Kuo-Yu LIU

C6: TELL

127P: Implementation and an Evaluation of a Search Function Allowing Misspelling for a Japanese Learning System

Hidenobu KUNICHIKA & Miguel Antonio VILLALOBOS ZUNIGA

C7: PTP

2P: An Experience Sampling Study of Student Emotional Life: Preliminary Results

Maria Mercedes T. RODRIGO, Liane Peña ALAMPAY, Queena N. LEE-CHUA & 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 & Sridhar IYER



Wednesday, 27 November 2024, 16:50-17:50

WIPP

216WIPP: Support System for Focused Discussion in Consensus Building for Team Sports Kazuma KUWADA & 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, Nur Aira ABD RAHIM & Priscilla MOSES

239WIPP: Online Educational Game for Interior Design with Design Thinking Process and Multidimensional Scaffolding

Chou-Pai YEOH & Huei-Tse HOU

247WIPP: Microlearning Strategy in ICT Education

Kotaro TORII

250WIPP: What Do University Students Say About ChatGPT? A Topic Modeling of Perception on GenAl in Academic Writing

Lingxi JIN, Kyuwon KIM, Hyo-Jeong SO & Ga Young LEE

265WIPP: Generative AI and XR in Education: Student Co-Created Metaverse Worlds in an International Virtual Exchange

Masako HAYASHI

SATELUC

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 REIS PIEDADE & Carla ALEXANDRA DA COSTA (**Timor-Leste**)

208SAT: Learning with Virtual Avatars: Insights into Performance and Resource Needs Antun DROBNJAK & Ivica BOTICKI (*Croatia*)

219SAT: MS Teams Acceptance Factors Among Polish and Ukrainian Students
Nataliia DEMESHKANT, Sławomir TRUSZ, Tetiana MATUSEVYCH & Amy SEPIOŁ (**Poland / Ukraine**)

225SAT: Boosting Literacy with an Educational RPG for Polytechnic Students

Agung Nugroho PRAMUDHITA, Puteri Ardista Nursisda MAWANGI & Banni Satria ANDOKO
(Indonesia)

230SAT: Development of the Board Game 'Career Champion': Gamification for Understanding Job Interview Preparation

Farid Angga PRIBADI, Banni Satria ANDOKO & Erina SEVIYANTI (Indonesia)

232SAT: Al Tools Experience in Civitas Academic Portal in Timor Leste

Agostinho Dos Santos GONÇALVES, Sebastião PEREIRA & Saida ULFA (**Timor-Leste**)

233SAT: Al 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 & Saida ULFA (**Timor-Leste**)

235SAT: Lecturer Performance Assessment System Based on Tridharma Using Saw Method Anita GUTERRES, Delfim da SILVA & Antonio GUTERRES (**Timor-Leste**)

252SAT: Al as a Co-Teacher: Enhancing Creative Thinking in Underserved Areas Roberto ARAYA (**Chile**)

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 & Kee-Fui TURNER-LAM

(Colombia / Peru / Mexico / Dominican Republic)



Thursday, 28 November 2024, 16:50-17:50

C1: AIED/ITS

66P: Quality Criteria Acquisition Support System of Product by Explaining It with Components Kota KUNORI & Tomoko KOJIRI

74P: Exploring Explainable Artificial Intelligence in Active Video Watching

Raul Vincent LUMAPAS, Antonija MITROVIC, Matthias GALSTER & Sanna MALINEN

87P: A Proposal of Quality Assurance Programming Exercise Nobuya ISHIHARA, Samsul HUDA & Yasuyuki NOGAMI

89P: Enhancing Engagement in Distance Learning: Overcoming Learner Isolation Through ICT Tools Kumiko AOKI, Itaru KANEKO, Ken KURIYAMA, Takeo TATSUMI & Takahiro MIYAJIMA

96P: Scaffolding Students' Ill-Structured Problem Solving via LLM — Multi-Armed Bandit Problem as a Case

Jiayi LIU & Bo JIANG

102P: Navigating Europe's Artificial Intelligence Act: Application of LLMs in Classrooms Upasana DASGUPTA & 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 & Yukihiro ITOH

C2: 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: SBF-Based Analogical Stories to Enhance Understanding of Complex Biological Processes

Meera PAWAR, Sheeja VASUDEVAN & Sahana MURTHY

198P: Challenging the Eye-Mind Link Hypothesis: Visualizing Gazes for Each Programming Problem *Michael T. LOPEZ II*

C3: 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 & 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 & Rihito YAEGASHI

156P: Development of Laborer Digital Twin Generation and Visualization Function for Hazard Prediction in Off-Site Training

Kaito MINOHARA, Toshiki MUGURMA, Yusuke KOMETANI, Naka GOTODA, Saerom LEE, Ryo KANDA, Shotaro IRIE & Toru HARAI

176P: HyCode: A Code Similarity Assessment Tool Utilizing Recurrent Neural Networks James Marcel A. ABAWAG, Aleczia S. TORDILLA & Joshua C. MARTINEZ

178P: Empowering Educational Researchers with a Privacy-Centric Data Platform: Design, Implementation, and Implications

Isanka WIJERATHNE, Brendan FLANAGAN & 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 & Chengjiu YIN



Thursday, 28 November 2024, 16:50-17:50

C5: EGG

5P: Exploring the Effects of Leaderboards on an Online Professional Development Course for Teachers

Aime Michelle LAZARO & 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 & Lu HUANG*

C7: PTP

11P: Online Student Testlet-Generation as an Innovation Approach to Student-Created Assessment Its Learning Effects

Fu-Yun YU & Ya-Shin CHANG

110P: Al and Data Science Literacy Framework for Educators

Nurul Amelina NASHARUDDIN, Nurfadhlina MOHD SHAREF & Mohd Khaizer OMAR

138P: Challenges to Augmenting Literacy in the Digital Environment Khalid KHAN & Jon MASON

169P: Unboxing Learner Engagement in an Online SEL for Teachers Course on FramerSpace Hritik GUPTA, Nandini Chatterjee SINGH & Shitanshu MISHRA

WIPP

221WIPP: Influence of Telepresence Robot on Discussion in Hybrid Classes *Hiroaki ARUGA & Akihiro KASHIHARA*

234WIPP: Proposal for Simulation Environment to Support Understanding of Tactical Positioning Yuki OHTSUKA & Tomko 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 CHUNG, Yu-Jen LIN, Min-Hsiong HONG, Cheng-Yuan WEI & Huei-Tse HOU

249WIPP: Instructors' Perceptions and Use of Feedback Dashboard Feng LIN & Rebekah Wei Ying LIM

255WIPP: Exploring Student Emotion via Facial Expressions Using Transfer Learning *Tita HERRADURA, Macario CORDEL II & Merlin Teodosia SUAREZ*

263WIPP: The Effect of Stimulus Concurrence on Memorizing Constellations in VR Nicko CALUYA, Eiji YAHARA & Damon CHANDLER