PROGRAM AT A GLANCE

DSC: Doctoral Student Consortia **ECW**: Early Career Workshop
W: Workshop **WIPP**: Work-in-progress Posters

All times are in Bangkok Time Zone

November 22 (Monday)	November 23 (Tuesday)	November 24 (Wednesday)	November 25 (Thursday)	November 26 (Friday)
8:00 – 10:00 Tutorial / W02 / W03 / W04 / W06 / W09	8:00 – 10:00 DSC / W01 / W07 / W11 / W12		8:00 – 9:00 Keynote: Tiffany BARNES	
		9:00 – 9:40 Opening Ceremony	9:00 – 9:40 Theme-based Speaker (Jon MASON) / 9:00 – 10:00 Parallel Sessions	9:00 – 10:00 Keynote: Gwo-Jen HWANG
		9:40 – 10:00 DRA Speech	9:40 – 10:00 Parallel Sessions	
10:00 – 10:20 Break	10:00 – 10:20 Break	10:00 – 10:10 Break	10:00 – 10:10 Break	10:00 – 10:10 Break
		10:10 – 11:10 Keynote: Kulthida TUAMSUK	10:10 – 11:20 Parallel Sessions / 11:00 – 12:30 Panel 3	10:10 – 11:10 Parallel Sessions
10:20 – 12:00 Tutorial / W02 / W03 / W04 / W06 / W09	10:20 – 12:00 DSC / W01 / W07 / W11 / W12	11:10 – 12:30 Parallel Sessions	11:20 – 12:30 Parallel Sessions	11:10 – 12:00 Closing Ceremony
12:00 – 1:00 Lunch	12:00 – 1:00 Lunch	12:30 – 1:30 Lunch	12:30 – 1:30 Lunch	12:00 – 1:30 Lunch
1:00 – 3:00 Student Wing Meeting W02 / W05 / W06 W08 / W09	1:00 – 3:00 ECW / W01 / W07 / W10 / W12	1:30 – 2:50 Panel 2 / 1:30 – 2:50 Parallel Sessions	1:30 – 2:30 Keynote: Pierre DILLENBOURG	1:00 – 3:30 EC Meeting
			2:30 – 2:40 Break	
		2:50 – 3:00 Break	2:40 – 3:40 Panel 1 / 2:40 – 4:00 Parallel Sessions	
3:00 – 3:20 Break	3:00 – 3:20 Break	3:00 – 3:40 Theme-based Speaker (Ana María GIMENO SANZ) / 3:00 – 4:00 Parallel Sessions		
3:20 – 5:00 SIG Leaders Meeting W02 / W05 / W06 W08 / W09	3:20 – 5:00 ECW / W01 / W07 / W10 / W12	4:00 – 5:30 Parallel Sessions	3:40 – 4:20 Theme-based Speaker (Baltasar FERNANDEZ-MANJON) / 4:00 – 4:30 Parallel Sessions	
	5:00 – 6:00 IPC Meeting		4:30 – 5:30 Posters / WIPP	

November 22 (Monday)

Time	Room 1	Room 2	Room 3	Room 4	Room 5	Room 6
8:00 – 10:00	Tutorial - Kit-Build Concept Map: Effective Online Learning Through Concept Map Recomposition	Workshop 2	Workshop 3	Workshop 4	Workshop 6	Workshop 9
10:00 – 10:20	BREAK					
10:20 – 12:00	Tutorial - Kit-Build Concept Map: Effective Online Learning Through Concept Map Recomposition	Workshop 2	Workshop 3	Workshop 4	Workshop 6	Workshop 9
12:00 – 1:00	LUNCH					
1:00 – 3:00	Student Wing Meeting	Workshop 2	Workshop 8	Workshop 5	Workshop 6	Workshop 9
3:00 – 3:20	BREAK					
3:20 – 5:00	SIG Leaders Meeting	Workshop 2	Workshop 8	Workshop 5	Workshop 6	Workshop 9

November 23 (Tuesday)

Time	Room 1	Room 2	Room 3	Room 4	Room 5
8:00 – 10:00	DSC	Workshop 1	Workshop 7	Workshop 11	Workshop 12
10:00 – 10:20	BREAK				
10:20 – 12:00	DSC	Workshop 1	Workshop 7	Workshop 11	Workshop 12
12:00 – 1:00	LUNCH				
1:00 – 3:00	ECW	Workshop 1	Workshop 7	Workshop 10	Workshop 12
3:00 – 3:20	BREAK				
3:20 – 5:00	ECW	Workshop 1	Workshop 7	Workshop 10	Workshop 12
5:00 – 6:00	IPC Meeting				

November 24 (Wednesday)

Time	Room 1	Room 2	Room 3	Room 4
9:00 – 9:40	Opening Ceremony			
9:40 – 10:00	DRA Speech			
10:00 – 10:10	BREAK			
10:10 – 11:10	Keynote: Kulthida TUAMSUK			
11:10 – 12:30		EGG-1	ALT/LA/DI-1	PTP-1
12:30 – 1:30	LUNCH			
1:30 – 2:50	Panel 2 - Leveraging Student-Generated Ideas (SGI) to facilitate socio-constructivist learning and conceptual change	AIED/ITS-1	TELL-1	PTP-2
2:50 – 3:00	BREAK			
3:00 – 4:00	3:00 – 3:40 Theme-based Speaker 1: Ana María GIMENO SANZ (C6)	AIED/ITS-2	PTP-3	CUMTEL-1
4:00 – 5:30		CSCL/LS-1	ALT/LA/DI-2	CUMTEL-2

November 25 (Thursday)

Time	Room 1	Room 2	Room 3
8:00 – 9:00	Keynote: Tiffany BARNES		
9:00 – 10:00	9:00 – 9:40 Theme-based Speaker (Jon MASON)	AIED/ITS-3	CUMTEL-3
10:00 – 10:10	BREAK		
10:10 – 11:20	11:00 – 12:30 Panel 3 - Seeking quality in EdTech solutions: Perspectives from across the ecosystem	AIED/ITS-4	ALT/LA/DI-3
11:20 – 12:30		CSCL/LS-2	ALT/LA/DI-4
12:30 – 1:30	LUNCH		
1:30 – 2:30	Keynote: Pierre DILLENBOURG		
2:30 – 2:40	BREAK		
2:40 – 4:00	2:40 – 3:40 Panel 1 - The Role of Artificial Intelligence in STEM Education	EGG-2	TELL-2
4:00 – 4:30	3:40 – 4:20 Theme-based Speaker (Baltasar FERNANDEZ-MANJON)	PTP-4	ALT/LA/DI-5
4:30 – 5:30	Posters & WIPP		

November 26 (Friday)

Time	Room 1	Room 2	Room 3
9:00 – 10:00	Keynote: Gwo-Jen HWANG		
10:00 – 10:10	BREAK		
10:10 – 11:10		ALT/LA/DI-6	PTP-5
11:10 – 12:00	CLOSING CEREMONIES		
12:00 – 1:30	LUNCH		
1:00 – 3:30	EC Meeting		

CONFERENCE PROGRAM

DSC: Doctoral Student Consortia   **ECW**: Early Career Workshop
W: Workshop   **WIPP**: Work-in-progress Posters
F   Full Paper (20 mins. presentation, 5 mins. Q&A)
S   Short Paper (10 mins. presentation, 5 mins. Q&A)
ES   Extended Summary (10 mins presentation + 5 mins Q&A)
D   Demo Paper
BOPN   Best Overall Paper Nominee
BSPN   Best Student Paper Nominee
BTDPN   Best Technical Design Paper Nominee

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22 November 2021 (Monday)		
8:00 – 10:00	Tutorial: Kit-Build Concept Map: Effective Online Learning Through Concept Map Recomposition *Aryo PINANDITO, Hiroshima University, Japan, Universitas Brawijaya, Indonesia* *Didik Dwi PRASETYA., Hiroshima University, Japan, Universitas Negeri Malang, Indonesia* *Yusuke HAYASHI, Hiroshima University, Japan* *Tsukasa HIRASHIMA, Hiroshima University, Japan*	Room 1

	Workshop W02: The 14th Workshop on Technology Enhanced Learning by Posing/Solving Problems/Questions
	Workshop Organizers:
	Yusuke HAYASHI, Hiroshima University, Japan
	Tsukasa HIRASHIMA, Hiroshima University, Japan
	Kazuaki KOJIMA, Teikyo University, Japan
	Tomoko KOJIRI, Kansai University, Japan
	Jon MASON, Charles Darwin University, Australia
	Antonija MITROVIC, University of Canterbury, New Zealand
	Fu-Yun YU. National Cheng Kung University, Taiwan
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W02-01 F: Adopting Online Teaching and Learning Utilizing AI Technology Enhancements Throughout the COVID-19 Pandemic and Beyond
	    Paul JENKINS, Nitin NAIK, Longzhi YANG
	
	#W02-02 D: A Learning Game on the Structure of Arithmetic Story by Chained Sentence Integration
	    Kohei YAMAGUCHI, Yusuke HAYASHI, Tsukasa HIRASHIMA
	
	#W02-03 S: Exploring the Effects of the Collaborative and Cooperative Test-construction Strategies
	    Chun-Ping WU
	
	#W02-04 S: Adopting No-Code Methods to Visualize Computational Thinking
	    Derrick HYLTON, Shannon SUNG, Charles XIE
	
	#W02-05 F: Co-construction of Question-Led Inquiries
	    Melvin FREESTONE, Jon MASON
	
	#W02-06 F: The Design and Effects of Online Contextual Student Generated Questions for English Grammar Learning
	    Chih-Chung LIN, Fu-Yun YU
		Room 2

	Workshop W03: Applications of Artificial Intelligence, Data Science and Intelligent Systems for Educational Research and Development (AIDS-ED)
	    Workshop Organizers:
	    Assoc. Prof. Tossapon BOONGOEN, Mae Fah Luang University (MFU), Thailand
	
	    Co-organizers:
	    Prof. Qiang SHEN & Dr Changjing SHANG, Aberystwyth University, UK
	    Asst.Prof. Shao-Chen CHANG, Yuan Ze University, Taiwan
	    Prof. Taesu CHEONG, Korea University, South Korea
	    Assoc.Prof. Kraisak KESORN Naresuan University, Thailand
	    Asst.Prof. Chih-Hung CHEN, National Taichung University of Education, Taiwan
		Room 3

22 November 2021 (Monday)		

8:00 – 10:00	Workshop W03 Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W03-01 F: Adopting Online Teaching and Learning Utilizing AI Technology Enhancements Throughout the COVID-19 Pandemic and Beyond
	    Paul JENKINS, Nitin NAIK, Longzhi YANG
	
	#W03-02 F: A Comparative Study of Missing Value Imputation Methods for Education Data
	    Phimmarin KEERIN
	
	#W03-03 S: Learning Activities Diagnostic Model Based on Educational Data Mining of Online Social Media Behavior
	    Khwunta KIRIMASTHONG, Pakphoom PROMMOO
	
	#W03-04 S: Improved Cluster Analysis for Graduation Prediction using Ensemble Approach
	    Patcharaporn PANWONG, Natthakan IAM-ON, James MULLANEY
		Room 3

	Workshop W04: Innovative Designs for Language Education : Transformative Technology Leadership
	    Chair Organizer: *Dr. Bhornsawan INPIN, Mae Fah Luang University, Chiang Rai, Thailand*
	    Co-Chair Organizers:
	    Xiong YUZHEN, Jinan University, China
	    Mei-Rong Alice CHEN, National Taiwan University of Science and Technology, Taiwan
	    Chi-Jen LIN, National Taiwan University of Science and Technology, Taipei, Taiwan
	    Phirunkhana PHICHIENSATHIEN, Mae Fah Luang University, Chiang Rai, Thailand
	
	    Organizers:
	    Teeraparp PREDEEPORCH, Mae Fah Luang University, Chaing Rai, Thailand
	    Nutdhavuth MEECHAIYO, Mae Fah Luang University, Chaing Rai, Thailand
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W04-001: Developing and Evaluating a "Virtual Go Mode" Feature on an Augmented Reality App to Enhance Primary Students' Vocabulary Learning Engagement
	    Yanjie SONG, Yin YANG, Ka Man LUNG
	
	#W04-002: Thai-Chinese Interpretation Online Course Design-Identifying and accommodating learners' needs
	    Fang YUAN, Kanlaya KHAOWBANPAEW
	
	#W04-003: "How Do You Build a Literature Course?": An Online Resource for Literature Curriculum Development
	    Panida MONYANONT, Teeranuch ANURIT
	
	#W04-004: Design and Development of Video Instruction Utilizing a Flipped Classroom Model: Implementing Examples of Synonyms 不 and 没
	    Lalita RUKVICHAI, Natsarun LAKSANAPEETI
	
	#W04-005: The Development of Flipped Learning Model for Foreign Language Class
	    Chun-Ye KIM
	
	#W04-007: A Challenge of Assistive Technology (AT) to the Needs of Visually Impaired (VIP) Learners in English Vocabulary Learning
	    Phirunkhana PICHIENSATHIEN, Bhornsawan INPIN
		Room 4

	Workshop W06: The 1st ICCE Workshop on EMBODIED Learning: Technology Design, Analytics & Practices
	    Organizers:
	    Rwitajit MAJUMDAR, Kyoto University, Japan
	    Aditi KOTHIYAL, Swiss Federal Institute of Technology Lausanne (EPFL) Switzerland.
	    Prajakt PANDE, Roskilde University, Denmark.
	    Shitanshu MISHRA, MGIEP UNESCO, India.
	    Jayakrishnan Madathil WARRIEM, IIT Madras, India.
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	#W06-01 F: Investigating Computer Designs for Grounded and Embodied Mathematical Learning
	    Mitchell NATHAN, Candace WALKINGTON, Michael SWART
	
	#W06-02 S: Design for Remote Embodied Learning: The Hidden Village-Online
	    Ariel FOGEL, Michael SWART, Jennifer SCIANNA, Matthew BERLAND, Mitchell NATHAN
		Room 5

22 November 2021 (Monday)		

8:00 – 10:00	Workshop W06: The 1st ICCE Workshop on EMBODIED Learning: Technology Design, Analytics & Practices
	#W06-04 F: Embodied learning in makerspaces
	   Ravi SINHA, Geetanjali DATE, Sanjay CHANDRASEKHARAN
	
	#W06-05 F: How Diseases Spread: Embodied Learning of Emergence with Cellulo Robots
	   Hala KHODR, Jerome BRENDER, Aditi KOTHIYAL, Pierre DILLENBOURG
	
	#W06-06 S: An AI-enhanced Pattern Recognition Approach to Analyze Children's Embodied Interactions
	   Ceren OCAK, Theodore J. KOPCHA, Raunak DEY
	
	#W06-07 S: Programming-RIO: Initiating Individuals into Computational Thinking using Real-world IoT Objects
	   Spruha SATAVLEKAR, Shitanshu MISHRA, Ashutosh RAINA, Sridhar IYER
	
	#W06-09 S: Making mechanisms: how academic language mediates the formation of dynamic concepts
	   Joseph SALVE, Pranshi UPADHYAY, Mashood K K, Sanjay CHANDRASEKHARAN
	
	#W06-10 F: Preparations for Multimodal Analytics of an Enactive Critical Thinking Episode
	   Rwitajit MAJUMDAR, Duygu ŞAHIN, Yuanyuan YANG, Huiyong LI
	
	#W06-11 F: Teacher enaction: modeling how teachers build new mechanism concepts in students' minds
	   Pranshi UPADHYAY, Joseph SALVE, Mashood K K, Sanjay CHANDRASEKHARAN
		Room 5

	Workshop W09: The 10th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2021)
	   Chair:
	   Bo JIANG, East China Normal University, China
	
	   Co-chair:
	   Patcharin PANJABUREE, Mahidol University, Thailand
	   Jayakrishnan M., Indian Institute of Technology Madras, India
	   May TALANDRON-FELIPE, University of Science and Technology of Southern Philippines, Philippines
	
	   Consultant:
	   Su Luan WONG, Universiti Putra Malaysia, Malaysia
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W09-01 S: Factors that Influence IT Students' Cyberchondria: Perspectives from the Philippines
	   Don Erick BONUS, Ryan EBARDO
	
	#W09-02 S: The effectiveness of object-oriented-QR Monopoly in enhancing ice-breaking and education UX: A preliminary study
	   Chien-Sing LEE, Kian-Wei LEE
	
	#W09-03 S: Mapping the Development of ICT from the Trend of Blended Learning: A Systematic Literature Review of the Blended Learning Trend in Education
	   Lin WANGA, Muhd Khaizer OMARA, Noor Syamilah ZAKARIAA, & Nurul Nadwa ZULKIFLIB
	
	#W09-04 S: Students' Online Learning Experience during the COVID-19 pandemic: A Case Study at Universiti Putra Malaysia
	   Su Luan WONGA, Mas Nida MD KHAMBARIB
	
	#W09-05 F: Transactional Distances During Emergency Remote Teaching Experiences
	   Ma. Monica L. MORENO, Maria Mercedes T. RODRIGO, Johanna Marion R. TORRES,
	   Timothy Jireh GASPAR, Jenilyn L. AGAPITO
	
	#W09-06 F: Exploring the differences in the cultivation of computational thinking in primary through meta-analysis based on the perspective of the contrast between the East and the West
	   L Xiu GUAN, Guoxia WEIB, Bo JIANG, Xiang FENGA
	
	#W09-07 F: Designing Prototype Laryngo-App Using 3D Model in Anatomy of Larynx
	   Poonyawee JIRARATTANAWAN, Ratchanon NOBNOP, Sujitra ARWATCHANANUKUL, Wimwipha SEEDET, Yootthapong TONGPAENG
	
	#W09-08 S: Comparing computational thinking in Scratch and non-Scratch Web design projects: A meta-analysis on framing and refactoring
	   Chien-Sing LEE
		Room 6

22 November 2021 (Monday)

8:00 – 10:00	Workshop W09: The 10th International Workshop on ICT Trends in Emerging Economies (WICTTEE 2021)
	#W09-09 S: ICT used in Problem-Based Learning: Case study of a Thai University
	   Nikorn RONGBUTSRI
	
	#W09-10 S: I Work to Learn: The Lived Experiences of Working Students in Online Learning During COVID-19
	   Ryan EBARDO, Santoso WIBOWO
	
	#W09-11 S: Developing a taxonomy of Edtech products for teachers: An integrated analysis from research literature and product landscape
	   ISHIKAA, Gargi BANERJEE, Sahana MURTHY
	
	#W09-12 S: A Development of Instructional Video for Increasing Learners' Motivation and Content Mastery in Video Learning Environment
	   Atima KAEWSA-ARD
	
	#W09-13 S: Design of Customizable Gamified Augmented Reality Apps: Towards Embracing Active Learning
	   Mas Nida MD KHAMBARI, Dan WANG, Su Luan WONG, Priscilla MOSES, Mohd. Najwan MD. KHAMBARI, Rahmita Wirza O.K. RAHMAT, Fariza KHALID
	
	#W09-14 S: Promoting Transformative Citizenship in Diverse Society: An Appraisal of Massive Open Online Course as a Teaching Platform
	   Anna Christi SUWARDI
	
	#W09-15 F: Perception of parents towards fun puzzle games in helping mild autistic children improve their computational thinking skills
	   Chien-Sing LEE, Joey Nelson YATIM
		Room 6

10:00 – 10:20	BREAK	
10:20 – 12:00	Continuation - Tutorial: Kit-Build Concept Map: Effective Online Learning Through Concept Map Recomposition (Room 1) Workshop W02 (Room 2) / Workshop W03 (Room 3) / Workshop W04 (Room 4) Workshop W06 (Room 5) / Workshop W09 (Room 6)	
12:00 – 1:00	LUNCH	
1:00 – 3:00	Student Wing Meeting: *Alwyn Vwen Yen LEE, Nanyang Technological University, Singapore*	Room 1
	Continuation - Workshop W02 (Room 2) / Workshop W06 (Room 5) / Workshop W09 (Room 6)	

	Workshop W08: Explorations in Online Teaching Modalities and Strategies
	   Organizers:
	   Ma. Louise Antonette N. DE LAS PENAS, Ateneo de Manila University, Philippines
	   Fr. Johnny C. GO, SJ, Ateneo de Manila University, Philippines
	   Isabel Pefianco MARTIN, Ateneo de Manila University, Philippines
	   Fr. Francis ALVAREZ, SJ, Ateneo de Manila University, Philippines
	   Galvin Radley L. NGO, Ateneo de Manila University, Philippines
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#EOTMTS-001 F: Balancing the Pedagogical and Practical Concerns in Remote Higher Education: A Cyberethnography
	   Jose Eos TRINIDAD, Samantha Joan ACKARY, Lyka Janelle PACLEB, Sophia Sue TABANAO, Jan Llenzl DAGOHOY
	
	#EOTMTS-004 F: Do Boredom, Escapism, Apathy, and Information Overload lead to Zoom Fatigue?
	   Ryan EBARDO, Reynold PADAGAS, Hazel TRAPERO
	
	#EOTMTS-005 F: Exploring student behavior during Student-Generated Questions activities on Programming Learning
	   Pham-Duc THO, Chih-Hung LAI, Thieu-Thi TAI
	
	#EOTMTS-006 F: Prelude to Full Online Learning: Educational Interventions from the Voice of the Customers
	   Arlene Mae CELESTIAL-VALDERAMA, Albert A. VINLUAN, Joel B. MANGABA
		Room 3

22 November 2021 (Monday)			
1:00 – 3:00	Workshop W05: The International Workshop on Learning Innovations in Science and Pre-Engineering Education (IWISPE)		Room 4
	Chair:		
	Jintana WONGTA, King Mongkut's University of Technology Thonburi, Thailand		
	Co-Chair:		
	Feline Panas ESPIQUE, Saint Louis University, Philippines		
	Cecilia A. MERCADO, Saint Louis University, Philippines		
	Hideaki ABURATANI, National Institute of Technology (NIT) HQ, Japan		
	Chiu-Lin LAI, National Taipei University of Education, Taiwan		
	Ekapong HIRUNSIRISAWAT, King Mongkut's University of Technology Thonburi, Thailand		
	Sukanlaya TANTIWISAWARUJI, King Mongkut's University of Technology Thonburi, Thailand		
	Charoenchai WONGWATKIT, Mae Fah Luang University, Thailand		
	Consultant:		
	Kongkarn VACHIRAPANUNG, Learning Institute of King Mongkut's University of Technology Thonburi, Thailand		
	Complete list of papers:		
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)		
	#W05-001 S: Using Stellarium in Educating the Young Generation on Ancient Lanna Astronomy		
	Pongsakorn PROMMING, Marut WONGTAPIN, Cherdsak SAELEE, Orapin RIYAPRAO		
	#W05-002 S: Gaining Holistic Insight to Inthakin Festival via Stellarium Sky-mapping		
	Veerapat SINTUPONG, Satanan SANPABOPIT, Suphakarn CHAISUK, Cherdsak SAELEE, Orapin RIYAPRAO		
	#W05-003 F: Development an Online Workshop in Developing AI-Driven Mobile Application: Design and Analysis of Aidea Workshop 2021		
	Chirayu INTARATANOO, Jintana WONGTA, Natlada SIMASATHIEN, Panchika LORTARAPRASERT, Peerapat SUPASRI, Sattarin CHOOCHOUY		
	#W05-004 S: The Design Process of STEM Learning Activities for Problem-Solving on the PM 2.5 Mask: The case of Primary School in Thailand		
	Jirapipat THANYAPHONGPHAT, Wantana AREEPRAYOLKIJ, Suttikan LAKANUKAN		
	#W05-005 S: ISOCHEM: Development of an Interactive 3D Game on the Web in Augmented Reality to Enhance Students' Learning of Isomers of Organic Chemistry		
	Pannida PRASANSON, Jirapipat THANYAPHONGPHAT, Chatchadaporn PINTHONG		
	#W05-006 S: A Development of Gamified Learning for Nursing Students' Public Health Investigation Process		
	Pimpisa CHOMSRI, Pattranit SRISERM, Mullika MATRAKUL		
	#W05-007 F: Targeting Chemistry Competencies on Plastic Circular Economy with Technology-assisted Citizen Inquiry: A Proposal of Learning Matrix		
	Anggiyani Ratnaningtyas Eka NUGRAHENI, Banjong PRASONGSAP, Niwat SRISAWASDI		
	#W05-008 F: Promoting Core Competencies of High School Biology through Citizen Inquiry Technology: A Case of Polluting Microplastics		
	Arum ADITA, Chawadol SRIBOONPIMSUAY, Niwat SRISAWASDI		
3:00 – 3:20	BREAK		
3:20 – 5:00	SIG Leaders Meeting: *Weiqin CHEN, Oslo and Akershus University College of Applied Science, Norway*		Room 1
	Continuation - Workshop W02 (Room 2) / Workshop W08 (Room 3) / Workshop W05 (Room 4) Workshop W06 (Room 5) / Workshop W09 (Room 6)		

23 November 2021 (Tuesday)			
8:00 – 10:00	Doctoral Student Consortium		Room 1
	Chair:		
	Morris JONG, The Chinese University Hong Kong, Hong Kong, China		
	Co-Chairs:		
	Hiroaki OGATA, Kyoto University, Japan		
	Bo JIANG, East China Normal University, China		
	Jayakrishnan Madathil WARRIEM, Indian Institute of Technology Madras, India		

23 November 2021 (Tuesday)		

8:00 – 10:00	**Workshop W01: The Applications of Information and Communication Technologies in Adult and Continuing Education**
	    Organizers:
	    Xibei XIONG, Guangxi Normal University, China
	    Chunping ZHENG, Beijing University of Posts and Telecommunications, China
	    Jyh-Chong LIANG, National Taiwan Normal University, Taiwan
	    Min-Hsien LEE, National Taiwan Normal University, Taiwan
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W01-001 F: Understanding Usage Continuance of Webinars among Professionals in the New Normal
	    Ryan EBARDO, Jefferson COSTALES, Don Erick BONUS, Santoso WIBOWO, John Byron TUAZON, José Rizal University
	
	#W01-002 F: Research on Design Thinking and TPACK of Physical Education Pre-service Teachers
	    Hungying LEE, Chingwei CHANG, Chiyang CHUNG
	
	#W01-003 F: A Review Study of the Application of Machine Translation in Education from 2011 to 2020
	    Yuyao ZHEN, Yaning WU, Guangming YU, Chunping ZHENG
	
	#W01-004 F: Online Interaction and Learning Engagement of Senior High School Students in a Less-Developed Region in China
	    Jingyi WANG, Chunping ZHENG
	
	#W01-005 F: Perceived Teacher Support in Online Literature Reading: Scale Development, Validation, and Prediction of Continuous Reading Intention
	    Yan SUN, Ying ZHOU, Jyh-Chong LIANG
	
	#W01-006 F: Exploring the online medical knowledge building in an university general education course
	    Sheng-Han YANG, Jyh-Chong LIANG
	
	#W01-007 F: A Practical Study of Information Technology-Driven Teaching Reform of Innovation and Entrepreneurship in Higher Education
	    Zhiming MENG, Xibei XIONG, Yu ZANG
	
	#W01-008 F: The Integration of Information Technology with Senior High English Reading Activities—A Case Study in Southwestern China
	    Yanhua CHEN, Kehaoyu CHEN, Chenxi QIN
		Room 2

	Workshop W07: The 5th Computer-Supported Personalized and Collaborative Learning
	    Organizers:
	    Robin CHIU-PIN, Lin National Tsing Hua University, Taiwan
	    Sherry Y. CHEN, National Central University, Taiwan and Brunel University, UK
	    Gwo-Haur HWANG, National Yunlin University of Science and Technology, Taiwan
	    Fu-Yun YU, National Cheng Kung University, Taiwan
	    Wenli CHEN, National Institute of Education (NIE), Nanyang Technological University (NTU), Singapore
	    Jitti NIRAMITRANON, Kasetsart University, Thailand
	    Shu-Yuan TAO, Takming University of Science and Technology, Taiwan
	    Hsiu-Ling CHEN, National Taiwan University of Science and Technology, Taiwan
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W07-01 S: Design and Implementation of an iOS APP: Multimedia Interactive System and Items for Woodworking Teaching
	    Chorng-Shiuh KOONG, Hung-Chang LIN, Chao-Chin WU, Chun-Hsien CHEN, Po-Huan LEE, Hsi-Chuan WANG
	
	#W07-02 F: The design of An Online Collaborative Orientation's Learning Activities to nurture Soft skills, Life skills and Self-directed learning
	    Chanakan GROSSEAU, Jintana WONGTA, Arnon THONGSAW, Kongkarn VACHIRAPANANG
	
	#W07-03 F: Leveraging Context for Computer-Supported Student-generated Questions and EFL Learning in Grammar Instruction: Its Effects on Task Performance
	    Wen-Wen CHENG, Fu-Yun YU
		Room 3

23 November 2021 (Tuesday)

8:00 – 10:00	Workshop W07: The 5th Computer-Supported Personalized and Collaborative Learning
	
	#W07-04 Poster: Mobile Learning System Combined with Adaptive Recommendation Mechanism--Taking outdoor learning activities of literature and history as an example
	   Yu-Zhen DAI, Kai-Yi CHIN
	
	#W07-05 F: Academic Help-seeking Preference of Students during Online Flexible Learning
	   May Marie P. TALANDRON-FELIPE, Gladys S. AYUNAR, Kent Levi A. BONIFACIO
	
	#W07-06 F: A Proposed Teacher Professional Development Program for Promoting Adult Teacher's TPACK in STEM Education
	   Pawat CHAIPIDECH, Niwat SRISAWASDI
	
	#W07-07 Poster: The Impact of Inquiry-based Integrated STEM on Student's Perception of Learning Science and Computer Programming
	   Chia-Jung CHANG, Shu-Yuan TAO
		Room 3

	Workshop W11: The 5th International Workshop on Information and Communication Technology for Disaster and Safety Education (ICTDSE2021)
	   Organizers:
	   Hisashi HATAKEYAMA, Tokyo Institute of Technology, Japan
	   Hiroyuki MITSUHARA, Tokushima University, Japan
	
	   Advisory Member:
	   Ruggiero LOVREGLIO, Massey University, New Zealand
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W11-002 S: Qualitative Evaluation of Information Display in a Regional Safety Map "Hamādo-map"
	   Yasuhisa OKAZAKI, Tatsunari MEGURO, Hiroshi WAKUYA, Yukuo HAYASHIDA, Nobuo MISHIMA
	
	#W11-003 S: Towards Building Mental Health Resilience through Storytelling with a Chatbot
	   Ethel ONG, Melody Joy GO, Rebecalyn LAO, Jaime PASTOR, Lenard Balwin TO
	
	#W11-004 F: Observing Evacuation Behaviors of Surprised Participants in Virtual Reality Earthquake Simulator
	   Hiroyuki MITSUHARA, Itsuki TANIOKA, Masami SHISHIBORI
	
	#W11-005 S: A Proposal to Use Walk Rally Learning with Mystery Solving to Foster Attachment to Place and Understanding of Regional Characteristics
	   Hisashi HATAKEYAMA, Masao MUROTA
		Room 4

	Workshop W12: The 9th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)
	   Chair: *Charoenchai WONGWATKIT, Mae Fah Luang University, Thailand*
	
	   Co-Chairs:
	   Niwat SRISAWASDI, Khon Kaen University, Thailand
	   Patcharin PANJABUREE, Mahidol University, Thailand
	   Ying-Tien WU, National Central University, Taiwan
	   Sasithorn CHOOKAEW, King Mongkut's University of Technology North Bangkok, Thailand
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W12-01 F: Trends of Engineering Design Process in STEM Education: A Systematic Review of the Evidence during 2017-2021
	   Teeratat SOPAKITIBOON, Surakit TUAMPOEMSAB, Sasithorn CHOOKAEW, Suppachai HOWIMANPORN
	
	#W12-02 S: Design and Development of an Augmented Reality Application for Learning a Serial-Link Robot Kinematics
	   Sarut PANJANA, Tarinee TONGGOED
	
	#W12-03 S: Designing a Mobile Application to Promote Vocational Students' Learning in Basic Technical Drawings Course
	   Tiptiya INTIP, Metha OUNGTHONG, Sasithorn CHOOKAEW
	
	#W12-04 S: Design and Development of a Low-Cost Robotic Platform for STEM Education of an Automatic Control System: Rotary-Type Double Inverted Pendulum Case
	   Wiput TUVAYANOND, Piyanun RUANGURAI
		Room 5

23 November 2021 (Tuesday)		

8:00 – 10:00	Workshop W12: The 9th Workshop on Technology-Enhanced STEM Education (TeSTEM Workshop)
	
	#W12-05 S: Developing a PLCs Experimental Kit through Role-playing for Students in Vocational Education
	   Boonkert SONTIPAN, Suppachai HOWIMANPORN, Sasithorn CHOOKAEW
	
	#W12-07 S: Using Series Elastic Actuator as a Tool to Motivate Students Engineering Learning in STEM Education
	   Piyanun RUANGURAI, Chaiyaporn SILAWATCHANANAI
	
	#W12-08 S: Designing a Project-based Plant to Enhance Mechatronics Students for Self-learning Embedded Control System
	   Chaiyaporn SILAWATCHANANAI, Piyanun RUANGURAI
	
	#W12-09 S: Integrated Knowledge and Skills with Multi-Material Learning for Engineering Students during COVID-19
	   Suppachai HOWIMANPORN, Ornanong TANGTRONGPAIROS, Sasithorn CHOOKAEW
	
	#W12-10 S: Design Web-based Personalized Environment for Industrial Robots Learning
	   Dechawut WANICHSAN, Konggrit PITANON, Sasithorn CHOOKAEW
	
	#W12-11 F: Development of a Gamified Number Line App for Teaching Estimation and Number Sense in Grades 1 to 7
	   Debbie Marie B. VERZOSA, Ma. Louise Antonette N. DE LAS PEÑAS, Maria Alva Q. ABERINB , Agnes D. GARCIANO, Jumela F. SARMIENTO, & Mark Anthony C. TOLENTINO
	
	#W12-12 F: For People and Planet: Evaluation of an Educational Mobile Game and Teacher Resource Pack
	   Maria Mercedes T. RODRIGO, Johanna Marion R. TORRES, Janina Carla M. CASTRO, Abigail Marie T. FAVIS, Ingrid Yvonne HERRAS, Francesco U. AMANTE, Hakeem JIMENEZ, Juan Carlo F. MALLARI, Kevin Arnel MORA, Walfrido David A. DIY, Jaclyn Ting Ting VIDAL, Ma. Assunta C. CUYEGKENG
	
	#W12-13 F: Applying Outcomes-Based Learning in Mechatronics and Robotics Program: Case Study of Singburi Technical College
	   Chatdanai SANEEWONGNAAYUTTAYA, Narongsak SANGNGOEN, Morakot KONGIN, Pattarapong PANHIRUN, Kittichai SAETUNG
	
	#W12-15 F: Case-based Professional Learning Course for Fostering Preservice Science Teachers' Technological Pedagogical and Content Knowledge of Inquiry with Mobile Game
	   Phattaraporn PONDEE, Niwat SRISAWASDI
		Room 5

10:00 – 10:20	BREAK	
10:20 – 12:00	Continuation - Doctoral Student Consortium (Room 1) Workshop W01 (Room 2) / Workshop W07 (Room 3) Workshop W11 (Room 4) / Workshop W12 (Room 5)	
12:00 – 1:00	LUNCH	

1:00 – 3:00	Early Career Workshop
	   Chair:
	    Mas Nida MD. KHAMBARI, Universiti Putra Malaysia, Malaysia
	
	   Co-Chairs:
	   Ryan EBARDO, José Rizal University, Philippines
	   Sharifah Intan Sharina SYED ABDULLAH, Universiti Putra Malaysia, Malaysia
	   Patcharin PANJABUREE, Mahidol University, Thailand
	
	   Consultant:
	   Jon MASON, Charles Darwin University, Australia
		Room 1

	Continuation - Workshop W01 (Room 2) / Workshop W07 (Room 3) Workshop W12 (Room 5)	

23 November 2021 (Tuesday)		

1:00 – 3:00	Workshop W10: The 8th ICCE workshop on Learning Analytics and Evidence-based Education
	    Organizers:
	Huiyong LI, Kyoto University, Japan
	Rwitajit MAJUMDAR, Kyoto University, Japan
	Brendan FLANAGAN, Kyoto University, Japan
	Weiqin CHEN, Oslo Metropolitan University, Norway
	Hiroaki OGATA, Kyoto University, Japan
	
	Complete list of papers:
	(*Note that the actual sequence of presentations will be determined by the workshop organizers*)
	
	#W10-001 S: Short Answer Questions Generation by Fine-Tuning BERT and GPT-2
	    Danny C.L. TSAI, Willy J.W. CHANG, Stephen J.H. YANG
	
	#W10-002 S: Exploring the Correlation between Students' Attention and Learning Performance
	    Xin-Ping HUANG, Chung-Kai YU and Stephen J.H. YANG
	
	#W10-004 F: Identifying Students' Stuck Points Using Self-Explanations and Pen Stroke Data in a Mathematics Quiz
	    Ryosuke NAKAMOTO, Brendan FLANAGAN, Kyosuke TAKAMI, Yiling DAI, Hiroaki OGATA
	
	#W10-005 S: Toward Educational Explainable Recommender System: Explanation Generation based on Bayesian Knowledge Tracing Parameters
	    Kyosuke TAKAMI, Brendan FLANAGAN, Yiling DAI, Hiroaki OGATA
	
	#W10-006 S: Performance prediction and importance analysis using Transformer
	    Akiyoshi SATAKE, Hironobu FUJIYOSHI, Takayoshi YAMASHITA, Tsubasa HIRAKAWA, Atsushi SHIMADA
	
	#W10-008 F: BEKT: Deep Knowledge Tracing with Bidirectional Encoder Representations from Transformers
	    Zejie TIAN, Guangcong ZHENG, Brendan FLANAGAN, Jiazhi MI, Hiroaki OGATA
	
	#W10-010 F: Designing Nudges for Self-directed Learning in a Data-rich Environment
	    Kinnari GATARE, Prajish PRASAD, Aditi KOTHIYAL, Pratiti SARKAR, Ashutosh RAINA, Rwitajit MAJUMDAR
		Room 4

3:00 – 3:20	BREAK	
3:20 – 5:00	Continuation - Early Career Workshop (Room 1) Workshop W07 (Room 3) / Workshop W10 (Room 4) / Workshop W12 (Room 5)	
5:00 – 6:00	IPC Meeting	Room 1

24 November 2021 (Wednesday)		
9:00 – 9:40	OPENING CEREMONY	Room 1
9:40 – 10:00	DRA Speech: Maria Mercedes T. RODRIGO, Ateneo de Manila University, Philippines	Room 1
10:00 – 10:10	BREAK	

10:10 – 11:10	Keynote Speech 1: Kulthida Tuamsuk (C7)
	    Moderator:
	    Thepchai SUPNITHI, National Electronics and Computer Technology Center, Thailand
		Room 1

11:10 – 12:30	EGG-1
	    Session Chair: *Maria Mercedes T. RODRIGO, Ateneo de Manila University*
	
	#6: Integrating Parsons Puzzles with Scratch - BOPN, BSPN (Full)
	    Jeffrey BENDER, Bingpu ZHAO, Lalitha MADDURI, Alex DZIENA, Alex LIEBESKIND, Gail KAISER
	
	#3: A RECIPE for Teaching the Sustainable Development Goals (Short)
	    Maria Mercedes T. RODRIGO, Walfrido David DIY, Abigail Marie FAVIS, Francesco AMANTE, Janina Carla CASTRO, Ingrid Yvonne HERRAS, Juan Carlo MALLARI, Kevin Arnel MORA, Johanna Marion R. TORRES and Ma. Assunta CUYEGKENG
	
	#20: Children Preference Analysis of A Mathematics Game- "Lily's Closet" (Short)
	    Wei Tung NIEN, Yi Chen WANG, Joni Tzuchen TANG
	
	#154: Tinkery: A Tinkerer's Nursery for Problem Solving with Lego Mindstorms (Short)
	    Ashutosh RAINA, Sridhar IYER, Sahana MURTHY
		Room 2

11:10 – 12:30	ALT/LA/DI-1
	    Session Chair: *Tsukasa HIRASHIMA, Hiroshima University, Japan*
	
	#35: Developing a Generic Skill Assessment System Using Rubric and Checklists (Full)
	    Makoto MIYAZAKI, Hiroyoshi WATANABE, Mieko MASAKA, Kumiko TAKAI
	
	#127: A Machine Learning Approach for Estimating Student Mastery by Predicting Feedback Request and Solving Time in Online Learning System (Full)
	    Kannan N, Charles Y. C. YEH, Chih-Yueh CHOU, Tak-Wai CHAN
	
	#78: Classification of learning patterns and outliers using Moodle course material clickstreams and quiz scores (Short)
	    Konomu DOBASHI, Curtis HO, Catherine FULFORD, Meng-Fen Grace LIN, Christina HIGA
	
	#86: Investigating the Tightness of Connection between Original Map and Additional Map in Extension Concept Mapping (Full)
	    Didik PRASETYA, Aryo PINANDITO, Yusuke HAYASHI, Tsukasa HIRASHIMA
		Room 3

	PTP-1
	    Session Chair: *Dan KOHEN-VACS, Holon Institute of Technology, Israel*
	
	#83: Mining Students' Engagement Pattern in Summer Vacation Assignment (Full)
	    Hiroyuki KUROMIYA, Rwitajit MAJUMDAR, Hiroaki OGATA
	
	#140: Alternative Approach for Evaluation Adapted for Times of Emergent Conditions (Full)
	    Dan KOHEN-VACS, Meital AMZALAG
	
	#93: The Use of Video Conferencing Applications Facilitating Students' Behavioral Engagement during Synchronous Learning in the Time of Pandemic (Short)
	    Mark Anthony ARIBON III
	
	#34: Facilitating collaborative learning among businesses, faculty, and students in a purely online setting (Short)
	    Joseph Benjamin ILAGAN, Matthew Laurence UY, Vince Nathan KHO, Joselito OLPOC
		Room 4

24 November 2021 (Wednesday)		
12:30 – 1:30	LUNCH	
1:30 – 2:50	**Panel 2 (C2)** - Leveraging Student-Generated Ideas (SGI) to facilitate socio-constructivist learning and conceptual change *Lung-Hsiang WONG, Chew Lee TEO, Longkai WU, Nanyang Technological University, Singapore*	Room 1

	AIED/ITS-1
	    Session Chair: *Ramkumar RAJENDRAN, Indian Institute of Technology Bombay, INDIA*
	
	#9: Investigating Engagement and Learning Differences between Native and EFL students in Active Video Watching (Full)
	    Negar MOHAMMADHASSAN, Antonija MITROVIC
	
	#121: Authoring Tool for Semi-automatic Generation of Task-Oriented Dialogue Scenarios (Full)
	    Emmanuel AYEDOUN, Yuki HAYASHI, Kazuhisa SETA
	
	#53: A System for Generating Student Progress Reports Based on Keywords (Short)
	    Shumpei KOBASHI, Tunenori MINE
	
	#134: A coding mechanism for analysis of SRL processes in a technology enhanced learning environment (Short)
	    Rumana PATHAN, Sahana MURTHY, Ramkumar RAJENDRAN
		Room 2

	TELL-1
	    Session Chair: *May Marie P. TALANDRON-FELIPE, Ateneo De Manila University / University of Science and Technology of Southern Philippines, Philippines*
	
	#22: Comparison of English Comprehension among Students from different backgrounds using a Narrative-Centered Digital Game - BTDPN (Full)
	    May Marie P. TALANDRON-FELIPE, Kent Levi A. BONIFACIO, Gladys S. AYUNAR, Maria Mercedes T. RODRIGO
	
	#88: Modelling the Relationship between English Language Learners' Academic Hardiness and Their Online Learning Engagement during the COVID-19 Pandemic (Short)
	    Lin LUAN, Yanqing YI, Jinjin LIU
	
	#92: Design and Evaluation of a Game-based Language Learning Web Application for English Language Learners in Thailand (Short)
	    Kornwipa POONPON, Wirapong CHANSANAM, Chawin SRISAWAT, Trinwattana POOCHANON
	
	#136: Proctored vs Unproctored Online Exams in Language Courses: A Comparative Study (Short)
	    Mehmet ÇELIKBAĞ, Ömer DELIALIOĞLU
		Room 3

	PTP-2
	    Session Chair: *Jon MASON, Charles Darwin University, Australia*
	
	#105: Low Adoption of Adaptive Learning Systems in Higher Education and How Can It Be Increased in Fully Online Courses (Full)
	    Rhodora ABADIA, Sisi LIU
	
	#119: Co-designing for a healthy EdTech ecosystem: Lessons from the Tulna research-practice partnership in India (Full)
	    Aastha PATEL, Chandan DASGUPTA, Sahana MURTHY, Rashi DHANANI
	
	#95: The M in STEM and Issues of Data Literacy (Short)
	    Khalid KHAN, Jon MASON
	
	#146: Students with Disabilities and Digital Accessibility in Higher Education under COVID-19 (Short)
	    Weiqin CHEN
		Room 4

24 November 2021 (Wednesday)		
2:50 – 3:00	BREAK	
3:00 – 4:00	3:00 – 3:40 Theme-based Speaker 1: Ana María GIMENO SANZ, Universitat Politècnica de Valencia, Spain Moderator: *Yoshiko GODA, Kumamoto University, Japan*	Room 1

	AIED/ITS-2
	  Session Chair: *Yu LU, Beijing Normal University, China*
	
	#17: Improving knowledge tracing through embedding based on Metapath (Full)
	  Chong JIANG, Wenbin GAN, Guiping SU, Yuan SUN, Yi SUN
	
	#29: Challenges to Applying Performance Factor Analysis to Existing Learning Systems (Short)
	  Cristina MAIER, Ryan BAKER, Steve STALZER
	
	#30: Does Large Dataset Matter? An Evaluation on the Interpreting Method for Knowledge Tracing (Short)
	  Yu LU, Deliang WANG, Penghe CHEN, Qinggang MENG
		Room 2

	PTP-3
	  Session Chair: *Lucian NGEZE, Indian Institute of Technology Bombay, India*
	
	#102: Development and Preliminary Evaluation of an Online System in Support of a Student-Generated Testlets Learning Activity (Short)
	  Fu-Yun YU
	
	#130: Learn to design (L2D): A TPD program to support teachers in adapting ICT learning materials to their local context through research-based strategies (Short)
	  Gaurav JAISWAL, Sunita RASTE, Sahana MURTHY
	
	#132: Research on the Construction of Evaluation Indicators System of Pre-service teachers' Teaching Competency in Special Delivery Classroom (Short)
	  Xiangchun HE, Peiliang MA, Xing ZHANG
	
	#152: From teaching to teacher training: Embedding important skills needed to develop a teacher trainer in cascaded Teacher Professional Development Programmes (Short)
	  Lucian Vumilia NGEZE, Sridhar IYER
		Room 3

	CUMTEL-1
	  Session Chair: *Brendan FLANAGAN, Kyoto University, Japan*
	
	#11: The Potential of Mobile Games in Improving Filipino and English Vocabulary among Children who are Non-native Speakers (Full)
	  May Marie P. TALANDRON-FELIPE, Maria Mercedes T. RODRIGO
	
	#106: Analytics of Open-Book Exams with Interaction Traces in a Humanities Course - BOPN (Full)
	  Rwitajit MAJUMDAR, Geetha BAKILAPADAVU, Jiayu LI, Hiroaki OGATA, Brendan FLANAGAN, Mei-Rong Alice CHEN
		Room 4

4:00 – 5:30	CSCL/LS-1
	  Session Chair: *Fu-Yun YU, National Cheng Kung University, Taiwan*
	
	#42: Flip & Slack - Active Flipped Classroom Learning with Collaborative Slack Interactions (Full)
	  Kyong Jin SHIM, Swapna GOTTIPATI, Yi Meng LAU
	
	#151: Designing Support for Productive Social Interaction and Knowledge Co-construction in Collaborative Annotation - BOPN, BSPN (Full)
	  Xinran ZHU, Hong SHUI, Bodong CHEN
	
	#153: Theoretical and Practical Framework for a Multinational, Precollege, Peer Teaching Collaborative (Short)
	  Eric HAMILTON, Danielle ESPINO, Seung LEE
	
	#5: A Measure to Cultivate Engaged Peer Assessors: A Validation Study on its Efficacy (Short)
	  Yu-Hsin LIU, Kristine LIU, Fu-Yun YU
		Room 2

24 November 2021 (Wednesday)		

4:00 – 5:30	ALT/LA/DI-2
	    Session Chair: *Hiroaki OGATA, Kyoto University, Japan*
	
	#48: Prior Knowledge on the Dynamics of Skill Acquisition Improves Deep Knowledge Tracing - BOPN (Full)
	    Qiushi PAN, Taro TEZUKA
	
	#57: Blockchain in Education: Visualizations and Validating Relevance of Prior Learning Data (Short)
	    Patrick OCHEJA, Brendan FLANAGAN, Rwitajit MAJUMDAR, Hiroaki OGATA
	
	#91: An AES System to assist teachers in grading Language Proficiency and Domain Accuracy using LSTM networks. (Short)
	    Aditya SAHANI, Forum PATEL, Shivani MEHTA, Rekha RAMESH, Ramkumar RAJENDRAN
	
	#52: Analysis of the Answering Processes in Split-Paper Testing to Promote Instruction (Short)
	    Shin UENO, Yuuki TERUI, Ryuichiro IMAMURA, Yasushi KUNO, Hironori EGI
	
	#ES-01: Improving Face-to-Face Communication Skills using Active Video Watching (Extended Summary)
	    Ja'afaru MUSA, Antonija MITROVIC, Matthias GALSTER, Sanna MALINEN
		Room 3

	CUMTEL-2
	    Session Chair: *Ryan EBARDO, Jose Rizal University, Philippines*
	
	#129: Human Factors in the Adoption of M-Learning by COVID-19 Frontline Learners (Full)
	    Ryan EBARDO, Merlin Teodosia SUAREZ
	
	#137: Design Guidelines for Scaffolding Self-Regulation in Personalized Adaptive Learning (PAL) systems: A Systematic Review (Full)
	    Vishwas BADHE, Gargi BANERJEE, Chandan DASGUPTA
	
	#120: EXAIT: A Symbiotic Explanation Education System (Short)
	    Brendan FLANAGAN, Kyosuke TAKAMI, Kensuke TAKII, Dai YILING, Rwitajit MAJUMDAR, Hiroaki OGATA
	
	#114: Effects of virtual reality on students' creative thinking during a brainstorming session (Short)
	    Mondheera PITUXCOOSUVARN, Victoria ABOU-KALIL, Hiroaki OGATA, Yohei MURAKAMI
		Room 4

25 November 2021 (Thursday)		
8:00 – 9:00	Keynote Speech 4: Tiffany BARNES, North Carolina State University, United States Moderator: *Antonija MITROVIC, University of Canterbury, New Zealand*	Room 1
9:00 – 10:00	9:00 – 9:40 Theme-based Speaker: Jon MASON, Charles Darwin University, Australia Moderator: *Ramkumar RAJENDRAN, Indian Institute of Technology Bombay, India*	Room 1

	AIED/ITS-3
	    Session Chair: *Kazuhisa SETA, Osaka Prefecture University, Japan*
	
	#39: In-process Feedback by Detecting Deadlock based on EEG Data in Exercise of Learning by Problem-posing - BOPN, BTDPN (Full)
	    Sho YAMAMOTO, Yuto TOBE, Yoshimasa TAWATSUJI, Tsukasa HIRASHIMA
	
	#68: Gaze- and Semantics-Aware Learning Material to Capture Learners' Comprehension Process (Short)
	    Akio OKUTSU, Yuki HAYASHI, Kazuhisa SETA
	
	#68: Learning the Condition of Addition and Subtraction Word Problems by Problem-Posing based on Representation Conversion Model (Short)
	    Yusuke HAYASHI, Natsumi TSUDAKA, Kengo IWAI, Tsukasa HIRASHIMA
		Room 2

25 November 2021 (Thursday)		

9:00 – 10:00	CUMTEL-3
	
	    Session Chair:
	    Aungtinee KITTIRAVECHOTE, Bansomdejchaopraya Rajabhat University, Thailand
	
	#55: Comparison of Experts and Novices in Determining the Gravitational Acceleration using Mobile Phone with Phyphox Application (Short)
	    Aungtinee KITTIRAVECHOTE, Thanida SUJARITTHAM
	
	#116: Karyotype: An interactive learning environment for reasoning and sense making in genetics through a case-based approach (Short)
	    Sunita RASTE, Anurag DEEP, Sahana MURTHY
	
	#117: Design and Deployment of a Mobile Learning Cloud Network to Facilitate Open Educational Resources for Asynchronous Learning (Short)
	    Joselito Christian Paulus VILLANUEVA, Mark Anthony MELENDRES, Catherine Genevieve LAGUNZAD, Nathaniel Joseph LIBATIQUE
	
	#147: TinkerBot: A Semi-Automated Scaffolding Agent as a Companion for Tinkering. (Short)
	    Shruti JAIN, Ashutosh RAINA, Sridhar IYER
		Room 3

10:00 – 10:10	BREAK	

10:10 – 11:20	AIED/ITS-4
	    Session Chair: *Ethel ONG, De La Salle University, Philippines*
	
	#65: An Improved Model to Predict Student Performance Using Teacher Observation Reports - BSPN
	    Menna FATEEN, Kyouhei UENO, Tsunenori MINE
	
	#23: Diverse Linguistic Features for Assessing Reading Difficulty of Educational Filipino Texts (Short)
	    Joseph Marvin IMPERIAL, Ethel ONG
	
	#41: Using Qualitative Data from Targeted Interviews to Inform Rapid AIED Development (Short)
	    Jaclyn OCUMPAUGH, Stephen HUTT, Juliana Ma. Alexandra L. ANDRES, Ryan BAKER, Gautam BISWAS, Nigel BOSCH, Luc PAQUETTE, Anabil MUNSHI
	
	#128: Reflection Support Environment for Creative Discussion Based on Document Semantics and Multimodal Information (Short)
	    Atsuya SHONO, Yuki HAYASHI, Kazuhisa SETA
		Room 2

	ALT/LA/DI-3
	    Session Chair: *May Kristine Jonson CARLON, Tokyo Institute of Technology, Japan*
	
	#64: A Thematic Summarization Dashboard for Navigating Student Reflections at Scale (Full)
	    Yuya ASANO, Sreecharan SANKARANARAYANAN, Majd SAKR, Christopher BOGART
	
	#43: Learning Analytics Dashboard Prototype for Implicit Feedback from Metacognitive Prompt Responses (Short)
	    May Kristine Jonson CARLON, Jeffrey CROSS
	
	#62: Analysing reachable and unreachable codes in App Inventor programs for supporting the assessment of computational thinking concepts (Short)
	    Siu Cheung KONG, Chun Wing POON, Bowen LIU
	
	#96: Conceptual Level Comprehension Support of The Object-Oriented Programming Source-Code Using Kit-Build Concept Map (Short)
	    Nawras KHUDHUR, Pedro Gabriel Fontales FURTADO, Aryo PINANDITO, Shimpei MATSUMOTO, Yusuke HAYASHI, Tsukasa HIRASHIMA
		Room 3

11:00 – 12:30	Panel 3 - Seeking quality in EdTech solutions: Perspectives from across the ecosystem Sahana MURTHY, Indian Institute of Technology Bombay, India	Room 1

11:20 – 12:30	CSCL/LS-2
	    Session Chair: *Priscilla MOSES, Universiti Tunku Abdul Rahman, Malaysia*
	
	#113: Laboratory Study on ICAP Interventions for Interactive activity: Investigation Based on Learning Performance (Full)
	    Shigen SHIMOJO, Yugo HAYASHI
	
	#38:STEM and Non-STEM Students' Perception towards Work Environment and Career Prospect (Short)
	    Priscilla MOSES, Tiny Chiu YUEN TEY, Phaik Kin CHEAH
		Room 2

25 November 2021 (Thursday)		

11:20 – 12:30	CSCL/LS-2
	
	#79:Fostering conceptual change in software design (Short)
	   Lakshmi T G, Sridhar IYER
	
	#87:The Effectiveness of Collaborative Concept Map Recomposition and Discussion with Kit-Build Concept Map in Online Learning (Short)
	   Aryo PINANDITO, Didik PRASETYA, Nawras KHUDHUR, Yusuke HAYASHI, Tsukasa HIRASHIMA
		Room 2

	ALT/LA/DI-4
	   Session Chair: *Paraskevi TOPALI, GSIC-EMIC Research Group, Spain*
	
	#144: Profiling Student Learning from Q&A Interactions in Online Discussion Forums - BSPN (Full)
	   De Lin ONG, Kyong Jin SHIM, Swapna GOTTIPATI
	
	#82: Supporting MOOC Instructors in the Identification of Learner Problems Framed within the Learning Design (Short)
	   Paraskevi TOPALI, Alejandro ORTEGA-ARRANZ, Alejandra MARTÍNEZ-MONÉS, Sara VILLAGRÁ-SOBRINO, Juan Ignacio ASENSIO-PÉREZ, Yannis DIMITRIADIS
	
	#124: Automatic classification of MOOC forum messages to measure the quality of peer interaction (Short)
	   Urvi SHAH, Richa RAMBHIA, Prakruti KOTHARI, Rekha RAMESH, Gargi BANERJEE
	
	#150: Identifying and Comparing Topic Categories and Interaction Features in MOOC Discussions Supported by Danmaku (Short)
	   Bo YANG
		Room 3

12:30 – 1:30	LUNCH	
1:30 – 2:30	Keynote Speech 3: Pierre DILLENBOURG, Swiss Federal Institute of Technology, Switzerland Moderator: *Kate THOMPSON, Queensland University of Technology, Australia*	Room 1
2:30 – 2:40	BREAK	
2:40 – 3:40	Panel 1 - The Role of Artificial Intelligence in STEM Education *Siu Cheung KONG, The Education University of Hong Kong, Hong Kong*	Room 1

2:40 – 4:00	EGG-2
	   Session Chair: *Jonathan DL CASANO, Ateneo de Manila University, Philippines*
	
	#50: Tactical Knowledge Acquisition Support System from Play Videos of Esports Experts (Full)
	   Minato SHIKATA, Tomoko KOJIRI
	
	#103: Robot with Embodied Interactive Modes as a Companion Actor in Journey of Digital Situational Learning Environment and its Effect on Students' Learning Performance - BTDPN (Full)
	   Vando Gusti AL HAKIM, Su-Hang YANG, Jen-Hang WANG, Chiu-Chen YEN, Lung YEH, Gwo-Dong CHEN
	
	#8: Designing Games for Stealth Health & Healthy Lifestyle Education (Short)
	   Nilufar BAGHAEI
	
	#107: Xiphias: Using A Multidimensional Approach Towards Creating Meaningful Gamification-Based Badge Mechanics (Short)
	   Jonathan CASANO, Jenilyn AGAPITO, Nicole Ann TOLOSA
		Room 2

	TELL-2
	   Session Chair: Jingjing LIAN, Peking University, China
	
	#36: A Quasi-experimental Study of University English Learners' Engagement in a Flipped Classroom - BOPN (Full)
	   Jingjing LIAN, Jiyou JIA
	
	#26: Integrating E-learning into Self-regulated Learning Instruction: A Holistic Flipped Classroom Design of a Classical Chinese Reading Intervention Program (Short)
	   Kit Ling LAU
	
	#84: A Flipped Model of Active Reading Using Learning Analytics-enhanced E-book Platform (Short)
	   Yuko TOYOKAWA, Rwitajit MAJUMDAR, Louis LECAILLIEZ, Hiroaki OGATA
	
	#100: The Learning Potential of Online Student-Generated Questions Based on Given Graphics for English Language Learning (Short)
	   Fu-Yun YU
		Room 3

25 November 2021 (Thursday)		
3:40 – 4:20	Theme-based Speaker: Baltasar FERNANDEZ-MANJON, Complutense University of Madrid (UCM) Spain Moderator: *Rita KUO, New Mexico Institute of Mining and Technology, USA*	Room 1

4:00 – 4:30	PTP-4
	    Session Chair: Ma. Monica MORENO, Ateneo de Manila University, Philippines
	
	#19: Cura Personalis: Institutionalizing Compassion During Emergency Remote Teaching (Short)
	    Ma. Monica MORENO, Ma. Mercedes RODRIGO, Johanna Marion TORRES, Timothy Jireh GASPAR, Jenilyn AGAPITO
	
	#81: Educational leadership and children's resilience: German and Polish schools during COVID-19 (Short)
	    Paulina BURKOT, Amy SEPIOŁ, Nataliia DEMESHKANT
		Room 2

	ALT/LA/DI-5
	    Session Chair: Yu LU, Beijing Normal University, China
	
	#7: SLP: A Multi-Dimensional and Consecutive Dataset from K-12 Education(Short)
	    Yu LU, Yang PIAN, Ziding SHEN, Penghe CHEN, Shengquan YU
	
	#143: Evaluation of a Motion Capture and Virtual Reality Classroom for Secondary School Teacher Training. (Short)
	    Sandra ALONSO, Daniel LÓPEZ, Andrés PUENTE, Alejandro ROMERO, Ibis ALVAREZ, Borja MANERO
		Room 3

4:30 – 5:30	Posters / Work-in-progress Posters	Room 2

26 November 2021 (Friday)		
9:00 – 10:00	Keynote Speech 2: Gwo-Jen HWANG, National Taiwan University of Science and Technology, Taiwan Moderator: *Jingyun WANG, Durham University, UK*	Room 1
10:00 – 10:10	BREAK	

10:10 – 11:10	ALT/LA/DI-6
	    Session Chair: Nguyen-Thinh LE, Humboldt-Universität zu Berlin, Germany
	
	#54: From Hello to Bye-Bye: Churn prediction in English Language Learning App (Full)
	    Daevesh SINGH, Rumana PATHAN, Gargi BANERJEE, Ramkumar RAJENDRAN
	
	#126: How Can Pedagogical Agents Detect Learner's Stress? (Full)
	    Nguyen-Thinh LE, Melanie BLECK, Niels PINKWART
		Room 2

	PTP-5
	    Session Chair: Siu Cheung KONG, The Education University of Hong Kong, Hong Kong
	
	#60: From Mathematical Thinking to Computational Thinking: Use Scratch Programming to Teach Concepts of Prime and Composite Numbers (Full)
	    Siu Cheung KONG, Wai Ying KWOK
	
	#112: GUI Based System for Effortless Program Visualization Creation Using Time Series Information - BOPN, BTDPN (Full)
	    Koichi YAMASHITA, Miyu SUZUKI, Satoru KOGURE, Yasuhiro NOGUCHI, Raiya YAMAMOTO, Tatsuhiro KONISHI, Yukihiro ITOH
		Room 3

11:10 – 12:00	CLOSING CEREMONY	
12:00 – 1:30	LUNCH	
1:00 – 3:30	EC Meeting	

POSTERS (P) & WORK-IN-PROGRESS POSTERS (WIPP)
25 November 2021 (Thursday) 4:30 – 5:30 PM, Room 2

P: Poster
WIPP: Work-in-progress Posters

#40 P: Viewpoint Transformation Training System Based on Discovery of Relationships Between Objects
   Kota KUNORI and Tomoko KOJIRI

#47 P: Support System for Understanding Intention in Communication Using Diagrams
   Koushi UEDA and Tomoko KOJIRI

#49 P: Chinese Grammatical Error Detection Using Adversarial ELECTRA Transformers
   Lung-Hao LEE, Man-Chen HUNG, Chao-Yi CHEN, Rou-An CHEN, Yuen-Hsien TSENG

#69 P: Presentation Scenario Design Support System That Prompts Awareness of Other Viewpoints
   Kazumi MASAKADO, Yuki HAYASHI, Kazuhisa SETA

#71 P: Visualization of Topics and Logical Development Based on Reader's Understanding of Inter-sentence Relations for Reading Support
   Yuki OKANIWA, Tomoko KOJIRI

#28 P: Explore the contribution of learning style for predicting learning achievement and its relationship with reading learning behaviors
   Fuzheng ZHAO, Bo JIANG, Juan ZHOU, Chengjiu YIN

#16 P: Research on the application of College Students' online learning cognitive engagement evaluation
   Yonghong WANG, Xiangchun HE

#118 P: Integration of Programming-based Tasks into Mathematical Problem-based Learning
   Zhihao CUI, Oi-Lam NG, Morris JONG

#149 P: Web-Based Engineering Design Activity in Biology: An Assessment on the Demonstration of Higher-Order Thinking Skills
   Ma. Andrea Claire CARVAJAL

#32 P: A Mixed Study to Understand Taiwanese Children's Preference for A Mobile Game
   Yi Chen WANG, Wei Tung NIEN, Joni Tzuchen TANG

#133 P: The impact of Augmented Reality applied in Vocabulary Learning and Use on Elementary EFL School Students
   Chin-Huang LIAO, Wen-Chi Vivian WU, Tin-Chang CHANG, Chang-Hung LEE

#13 P: Birds of Paradise: A Game on Urban Bird Biodiversity Conservation
   Jamielyn Mae VILLANUEVA, Patricia Vianne LEE, James Matthew CUARTERO

#46 P: Suggestions for special education teachers to practice spherical image-based virtual reality instruction in classrooms: a case study
   Kun-Hung CHENG

#51 P: Computational Fluency and the Digital Divide in Japanese Higher Education
   Luc GOUGEON, Jeffrey CROSS

#70 P: Improvement of Teaching Based on the E-book Reader Logs: A Case Study at High School Math Class in Japan
   Taro NAKANISHI, Hiroyuki KUROMIYA, Rwitajit MAJUMDAR, Hiroaki OGATA

#21 P: Composition class using a system that encourages self-review —Focus on second language learning—
    Yan ZHAO, Haruhiko TAKASE, Hidehiko KITA

#89 P: Examining the effects of automatic speech recognition technology on learners' lexical diversity
    Michael JIANG, Morris JONG, Wilfred LAU

#139 P: Technology Integration in a Communicative English Classroom
    Ruth Z. HAUZEL

#WIPP-01: A Trial Study on Restraint of Mind-Wandering while Viewing Educational Videos by Adjusting Biofeedback Operations
    Toru NAGAHAMA, Naoki NOSE, Issaku KAWASHIMA, Yusuke MOTITA

#WIPP-02: Narrative Discourse Structure Creation Support System for Reflecting Theme and Emotional Impression
    Atsushi ASHIDA, Masataka TOKUMARU, Tomoko KOJIRI

#WIPP-03: Visualization Method of Movement of Teachers and Students in Classroom using OpenPose
    Misato FUTATSUISHI, Izumi HORIKOSHI, Yasuhisa TAMURA

#WIPP-04: Development of Mapping Function between Variable Value and Object Properties for Program Behavior Visualization Tool TEDViT
    Hiroki SOMA, Satoru KOGURE, Yasuhiro NOGUCHI, Koichi YAMASHITA, Raiya YAMAMOTO, Tatsuhiro KONISHI, Yukihiro ITOH

#WIPP-05: Extraction Method of Characteristics of Important Body Shapes and their Training Order for Motor Skill Acquisition
    Jinya SUMIZAKI, Tomoko KOJIRI

#WIPP-06: Instruction Support System Using Impasse Detector and Major Failure Diagnoser for Programming Exercises
    Tomoki IKEGAME, Yasuhiro NOGUCHI, Satoru KOGURE, Koichi YAMASHITA, Raiya YAMAMOTO, Tatsuhiro KONISHI, Yukihiro ITOH

#WIPP-07: Augmented Reality (AR) Analytics to Investigate Motor Skills for Crossing the Midline
    Manjeet SINGH, Shaun BANGAY, Atul SAJJANHAR

#WIPP-08: Motivating Ethnic Minority Students in Hong Kong to Learn Chinese Culture with EduVenture VR
    Morris Siu-Yung JONG, Nelson NG, Eric LUK, Jessie LEUNG, Michael Yi-Chao JIANG, Darwin LAU, Chin-Chung TSAI

#WIPP-09: An Augmented Reality Experience for Generating New Audiences for Spanish Dance
    Alejandro ROMERO-HERNANDEZA, Lara MARIN, Borja MANERO

#WIPP-10: The Development and Evaluation of an Online Educational Game Integrated with Real Person-NPC mechanism for History Learning
    Shu-Wei LIU, Hung-Yu CHAN, Huei-Tse HOU

#WIPP-11: Role of Preparation using Mobile Application for Summary-speaking Task in Face-to-face English-Speaking Pair Work
    Kae NAKAYA, Masao MUROTA

#WIPP-12: Proficiency, learning strategies, and logging behaviors on the dictation training courseware
    Yuichi Ono