The Seventh International Conference on Educational Innovation through Technology

(EITT 2018)

Programme Book

S I C E T   **MASSEY UNIVERSITY** TE KUNENGA KI PŪREHUROA UNIVERSITY OF NEW ZEALAND

Auckland, New Zealand, December 11-15, 2018

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The Seventh International Conference on Educational Innovation through Technology (EITT 2018)

Sponsored by: Society of International Chinese in Educational Technology (SICET)

https://sicet.org

Organized by: Massey University, New Zealand

https://www.massey.ac.nz/

Conference Chairs

Dr. HAN Xibin, Associate Professor of Tsinghua University

Dr. ZHANG Weiyuan, Professor of Beijing Normal University

Dr. Cynthia WHITE, Professor of Massey University

Technical Committee Chairs

Dr. HUANG Yueh-Min, Professor of Cheng Kung University

Dr. JIN Qun, Professor of Wesada University

Program Committee Chair

Dr. WANG Yuping, Associate Professor of Griffith University

Dr. LI Michael, Senior Lecturer of Massey University

Dr. LIM Cher Ping, Professor of the Education University of Hong Kong

Keynote 1: Innovation and Agency in Technology-mediated Language Teaching
by Cynthia J White

Dr. Cynthia White is Professor of Applied Linguistics, Massey University, New Zealand. She has published widely on distance and online learning, emotion in language learning, learner autonomy, and teacher identity and agency. She is a member of Editorial Boards of seven international journals, and is Associate Editor for the journal Language Learning & Technology.

Keynote 2: Affective Learning and Pedagogy using Affective Computing
by Huang Yueh-Min

Dr. Huang Yueh-Min is serving as a Vice president of Kun Shan University, Taiwan, where he is also a Chair Professor in Department of Engineering Science, National Cheng-Kung University. His research interests include e-Learning, multimedia communications, wireless networks, and artificial intelligence. Dr. Huang is in the editorial board of over 10 SSCI- and SCI-indexed journals. He became the Fellow of British Computer Society (FBCS) in 2010.

Keynote 3: Blended Learning in Chinese Higher Education and Vocational Education
by Han Xibin and Wang Yuping

Dr. HAN Xibin is an associate professor and associate dean of the Institute of Education at Tsinghua University. His research interests focus on exploring the potential of ICT in learning, teaching and administration in higher education and vocational education since 1998. It involves theories, technology, strategies and evaluation on blended learning and online education. He is the president of the Society of International Chinese in Educational Technology (SICET) in 2018.

Dr. Wang Yuping an associate professor of Griffith Institute for Educational Research School of Languages and Linguisticsis research. Her focuses on the use of Synchronous Computer Mediated Communication and Synchronous Learning Management Systems in improving second language learning outcomes. Her research has investigated the linguistic, intercultural and technological affordances of various synchronous online learning environments, with publications on online task design principles, criteria for selecting effective online learning platforms, e-pedagogy and e-tutor training strategies in a distance and online language learning context. She served as the Executive Committee Member of SICET for past four years.

About SICET and EITT

The Society of International Chinese in Educational Technology (SICET) will organize its seventh International Conference of Educational Innovation through Technology (EITT2018) to provide a forum for researchers in technology and education areas to publish new research findings and exchange insights and experiences on related topics. Founded in 2003, the Society of International Chinese in Educational Technology (SICET) is a nonpolitical, non-profit academic organization. The mission of SICET is to establish and strengthen international academic connections, exchanges, research, and studies in educational technology for teaching and learning, as well as to promote the application of educational technology in education.

The first six EITT conferences have been successfully held with EITT2012 in Beijing; EITT2013 in Williamsburg,; EITT2014 in Brisbane; EITT2015 in Wuhan; EITT2016 Tainan; and EITT2017 in Osaka.

The Seventh International Conference on Educational Innovation through Technology (EITT 2018) is held on December 11-15, 2018 in Auckland, New Zealand. EITT2018 is Sponsored by the Society of International Chinese in Educational Technology (SICET) and Organized by Massey University, New Zealand.

Venue Information

Conference Venue: Grand Millennium Auckland, Auckland, New Zealand
Address: 71 Mayoral Drive, Auckland, 1010, New Zealand
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SICET MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

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Schedule of Events for EITT2018

Day 1: 11 December 2018 (Tuesday)		
Time	**Event**	**Venue**
9:00 am	Registration	Lobby
5:30 pm	End of Registration	

Day 2: 12 December 2018 (Wednesday)		
Time	**Event**	**Venue**
9:00 am	Welcome Speech by Prof. Kerry Taylor Head of School of Humanities and of the WH Oliver Humanities Academy. Chair: Prof. Michael Li	Tasman Ballroom
9:15 am	Opening Ceremony by Prof. Xibin Han Chair: Prof. Shuyan Wang	Tasman Ballroom
9:30 am	Keynote Session 1 Title: Innovation and Agency in Technology-mediated Language Teaching by Prof. Cynthia J White (Massey University) Chair: Prof. Michael Li	Tasman Ballroom
10:10 am	Coffee Break	Pre Function Area
10:40 am	Keynote Session 2 Title: Affective Learning and Pedagogy using Affective Computing by Prof. Ray Yueh-Min Huang (Cheng Kung University，Vice president of Kun Shan University） Chair: Prof. Grace Qi	Tasman Ballroom
11:20	Keynote Session 3 Title: Blended Learning in Chinese Higher Education and Vocational Education by Prof. Xibin Han (Tsinghua University) and Prof. Yuping Wang (Griffith University) Chair: Prof. Yuju Lan	Tasman Ballroom
12:00 pm	Lunch	Pre Function Area
2:00 pm	Parallel Paper Presentation 1: Instructional Design and Pedagogy in Blended Learning	Tasman Ballroom 1
	Parallel Paper Presentation 2: Gamification, VR and AR　in Teaching and Learning	Tasman Ballroom 2
4:00 pm	Coffee Break	Pre Function Area

4:30 pm	Parallel Paper Presentation 1: Instructional Design and Pedagogy in Blended Learning	Tasman Ballroom 1
	Parallel Paper Presentation 2: Gamification, VR and AR in Teaching and Learning	Tasman Ballroom 2
5:30 pm	Dinner	Millennium I
End of Day 2 Programme		

Day 3: 13 December 2018 (Thursday)		
Time	**Event**	**Venue**
9:00 am	Parallel Paper Presentation 3: ICT and Application in Teaching and Learning	Tasman Ballroom 1
	Parallel Paper Presentation 4: Learning Assessment, Evaluation and Analytics	Tasman Ballroom 2
10:00 am	Coffee Break	Pre Function Area
10:30 am	Parallel Paper Presentation 3: ICT and Application in Teaching and Learning	Tasman Ballroom 1
	Parallel Paper Presentation 4: Learning Assessment, Evaluation and Analytics	Tasman Ballroom 2
12:00 pm	Lunch	Pre Function Area
2:00 pm	Parallel Paper Presentation 5: OERs, MOOC and SPOC	Tasman Ballroom 1
	Parallel Paper Presentation 6: Innovative Methods in Teaching and Learning	Tasman Ballroom 2
4:00 pm	Coffee Break	Pre Function Area
4:30 pm	Parallel Paper Presentation 5: OERs, MOOC and SPOC	Tasman Ballroom 1
	Parallel Paper Presentation 6: Innovative Methods in Teaching and Learning	Tasman Ballroom 2
5:30 pm	Dinner	Millennium I
End of Day 3 Programme		

Day 4: 14 December 2018 (Friday)		
Time	**Event**	**Venue**
9:00 am	Closing Ceremony	Tasman Ballroom
10:00 am	Coffee Break	
10:30 am	Award Presentation	Tasman Ballroom
12:00 pm	End of Day 4 Programme	

Day 5: 15 December 2018 (Saturday)		
Time	**Event**	**Venue**
9:00 am	Visiting Massey University	Massey University
12:00 pm	End of Day 5 Programme	
Afternoon	Leave New Zealand	

Parallel Paper Sessions

Parallel Paper Sessions 1 and 2

Day 2: 12 December 2018 (Wednesday)
2:00pm – 5:30pm

Paper Session 1 Instructional Design and Pedagogy in Blended Learning **(Venue: Tasman Ballroom 1)** **Session Chair: Prof. Ray Yueh-Min Huang (Cheng Kung University)** **15 minutes for Each Presentation**	**Paper Session 2** Gamification, VR and AR in Teaching and Learning **(Venue: Tasman Ballroom 2)** **Session Chair: Prof. Zuochen Zhang (University of Windsor)** **15 minutes for Each Presentation**
Fostering the Learning of English Idioms by Setting Children in a Virtual Environment Siao-Cing Guo and Gwo-Dong Chen	The Research and Practice of Maker Education and Associated Industrial Development Trends in China Shaogang Zhang, Peijie Cao, Shunping Wei, Shuqiang Song and Binli Liu.
Sensor Data-driven Emotion Perception in Physical Learning Spaces-A Review and Prospect Changli Fang, Zhi Liu, Qing Li and Sannyuya Liu	How Technology to Promote Learning Performance Hang Hu
An Empirical Study of Factors Influencing Undergraduates' Programming Learning Engagement in Blended Learning Environment Hao Tian and Fati Wu	The Influence of Debating Teaching on Students' Critical Thinking Development in Smart Classroom —Taking Primary School Chinese Reading Course as an Example Pinghong Zhou, Qiuping Wang and Yi Zhang
The Relationship between Teacher Autonomy and ICT Competency of Pre-Service Teachers Yue Wu and Fati Wu	Understanding the Digital Native Behaviors of College Students from Computer Experience Shun Xu and Shan Jiang
Development of a Model for Blended Learning based on BYOD: A Case Study Liu Lin, Liu Kai and Zhao Jianbao	Educational Robots: Classification, Characteristics, Application Areas and Problems Zhenghua Pei and Yong Nie

Research on the functional requirements of reading APP based on KANO model: A Case Study in China Yanyan Zhang	Exploring the Learning Effectiveness of "The STEAM Education of Flying and Assembly of Drone" Ching-Ju Chen, Yueh-Min Huang, Chuan-Yu Chang and Yi-Chun Liu
Employing digital technologies to scaffold language learning in flipped classrooms Grace Yue Qi and Yuping Wang	Design and Application of VR English Learning Game Based on APT Model Xiuli Hwang, Juhou He, Yushuai Liang, Guangixin Han and Jie Du
The Design and Evaluation of Moble App- Supported Basketball Teaching: A Blended Learning Approach Yingjie Zhang, Yuping Wang and Jiangang Cheng	A Quasi-Experimental Research on Instruction of English Writing Based on WeChat Official Account in Secondary Vocational Schools Fang Lu, Danhong Zhang and Wenxin Deng
Learners' Attention Preferences and Learning Paths on Online learning content:An Empirical Study Based on Eye Movement Su Mu and Meng Cui	Analyzing critical thinking elements in the argument structure of non-English-major Chinese undergraduate students' writing and the potential of RationaleTM software Ngajie Berty Nsolly, Li Yan and Su Chien-Yuan

Parallel Paper Sessions

Parallel Paper Sessions 3 and 4

Day 3: 13 December 2018 (Wednesday)
9:00 am – 12:00am

Paper Session 3 ICT and Application in Teaching and Learning **(Venue: Tasman Ballroom 1)** **Session Chair: Prof. Shuang Li (Beijing Normal University)** **15 minutes for Each Presentation**	Paper Session 4 **Issues in E-Learning:** Learning Assessment, Evaluation and Analytics **(Venue: Tasman Ballroom 2)** **Session Chair: Prof. Yuju Lan (Taiwan Normal University)** **15 minutes for Each Presentation**
The Inspiration of Digital Badges in Digital Citizenship Sijin Yu and Yunxiang Zheng	An educational data analysis framework and course profiling techniques based on Moodle's log Lei Huang
An Analysis of the Effectiveness of E-Schoolbag Usage in an Elementary School in Ningxia, China Liyan Liu and Zuochen Zhang	A Study on Individual Differences in Learner Perceived Teacher Support in Online Learning Hongxia Li, Chengling Zhao, Zhihui Jiang, Yan Huang

	and Fenghuang Shu
Developing a validated instrument to measure teachers' ICT competencies for university teaching in a digital age Wenshuang Ge and Xibin Han	Instructor's behavior effected learning performance in video lecture Hongyan Wang, Zhongling Pi, Wenshuang Ge, Yangping Li, Fangqi Yang and Weiping Hu
Instructors' Perspectives and Use of ICT in Two Teacher Education Programs Zuochen Zhang and Wendy Nielsen	Exploring factors affecting satisfaction of m-learning for students in high school Peng Zhou, Ranran He, Dan Zhang and Jinyang Rao
Design and Development of Network Learning Platform Based on the Big Data Concept Jieying Liu, Shan Jia, Qiao Qiao and Mang Li	Design and Application of Lesson Planning System to Promote Deep Learning Based on Learning Analytics Shan Jia, Jieying Liu and Fati Wu
The Research Development of Big Data in Education: A Bibliometric Analysis Based on Citespace Chenchen Ye	Comparison and Prospect of Two Heaven Approaches: SVM and ANN for Identifying Students' Learning Performance Sylvio Rüdian, Niels Pinkwart and Zhi Liu
Exploring Desirable Features of e-Textbooks for K-12 Classes: A Case Study Chaohua Gong and Tao Xie	A Study on the Development Trend of the "Internet+" Education Ping Yang and Geping Liu
Some factors influencing teachers' intention to use ICT in teaching in Secondary Vocational Schools in China Wen Wang and Xibin Han	Research on Influence Factors of the Teaching Effectiveness of Problem-Solving Micro Classes Xiaojuan Yang and Daoknun Gong
A Case Study on the Flipped Classroom in a Chinese Undergraduate Course Li Zhao and Shuyan Wang	The development of English language learning application based on smart phone Jiejin Luo, Zhe Li and Nishimori Toshihisa
Data Model Building for Online Teachers' Professional Development Hongtao Sun, Hengguo Zhang and Qinhua Zheng	Research Performance Evaluation for Measuring Efficiency with Data Envelopment Analysis Method Dongxue Liu, Hongtao Sun and Luoying Huang

Parallel Paper Sessions

Parallel Paper Sessions 5 and 6

Day 3: 13 December 2018 (Wednesday)
2:00 pm –5:30am

Paper Session 5 OERs, MOOC and SPOC **(Venue: Tasman Ballroom 1)** **Session Chair: Prof. Geping Liu (Xinan University)** **15 minutes for Each Presentation**	Paper Session 6 Innovative Methods in Teaching and Learning **(Venue: Tasman Ballroom 2)** **Session Chair: Prof. Shuyang Wang (The University of Southern Mississippi)** **15 minutes for Each Presentation**
Tracking the dynamics of SPOC discussion forums: a temporal emotion-topic modeling approach Zhi Liu, Sylvio Rüdian, Chongyang Yang, Jianwen Sun and Sannyuya Liu	Analyzing the relationship among learners' social characteristics, sentiments in a course forum and learning outcomes Lingyun Kang, Zhi Liu, Zhu Su, Qing Li and Sannyuya Liu
A Cluster Study on MOOC Students' Participation Patterns: A Case Study of a Chinese MOOC Shuang Li and Yuanyuan Zhang	Predicting Student Behaviors and Performance in Online Learning Using Decision Tree Gaihua Wang, Jing Zhang and Gangshan Fu
Design, Development and Application of Big Data Platform on Provision of Job Information Search Services for Students in the Vocational College Weiyuan Zhang, Fangxia Hu and Qingsong Xie	Study on the Application of Wechat in College English Listening and Speaking Course Jing Zhang and Xin Zheng
Research on Construction of SPOC Instructional Model Based on ARCS and Practice in Open Education Yanshuang Jiang, Yong Nie and Can Cui	Role of Teaching Assistants in Synchronous Smart Classrooms Shen Zhao, Hao Yang and Yanhong Li
What makes a MOOC work for teacher professional development? Xiaomeng Wu and Xiao Ma	The Current Situation and Countermeasures of Chinese Vocational Education Resources Construction in the Era of Information Technology 2.0 Yichun Zhang and Nan Ge
The practice and research on the promotion mode of MOOCs in higher education based on innovation diffusion theory Haixia Zhao, Qingqing Liu and Hongchun Zhou	Study on Online Learners' Activity Path Based on Lag Sequence Analysis Danni Hu, Mengyao Zhang and Qinhua Zheng
How Learners Participate in Connectivist Learning in distributed Blog Spaces: A Social Network Analysis of Interaction Behavior Traces from a cMOOC Zhijun Wang and Lu Liu	The Design and Enpirical Study of Online Dailogic Teaching Model Hui Deng, Ming Liu, Rui Su and Xueting Dang
Construction and Application of Share-Synergy-Innovate (SSI) Mode Based on MOOC Youru Xie, Yi Qiu and Jia Li	Study on the Impact on K-12 Students' Eyes and Hand Movement Habits by the Use of Tablets in Education Hong Feng, Tao Feng and Lu Wang