A Workshop Proposal for the 20th Global Chinese Conference on Computers in Education (GCCCE) (2016)

Title of the workshop: Computer-Supported Personalized and Collaborative Learning

Style of the workshop: Mini-conference (Paper presentations)

A brief description of the workshop topic

The development of advanced information technologies has opened up new opportunities in the area of computer supported learning environments. A key aspect of this work lies within the fact that students can access learning material at any time and any places. As a result of such convenience, a wide range of people have begun using computer supported learning environments for supporting instruction. Thus, it is important to ensure that such computer supported learning environments can accommodate diverse students' needs.

To address this issue, it is necessary to incorporate personalization into the development of computer supported learning environments. Personalization is acknowledged as a useful approach to develop added value services in computer supported learning environments. It can help students with different characteristics, backgrounds and needs to get different types of content presentation and navigation support. In this context, a deep understanding of personalization is essential for the development of computer supported learning environments.

While acknowledging the essentiality of personalization, the importance of incorporating an element of collaboration during the process so that students can contribute to each other's learning has become prevalent in educational practice with the advent of Web 2.0 technologies. Thus, issues on how to address these two aspects simultaneously if desirable, or at different learning stages to create optimal learning space and experience for involved learners are the focus of this workshop. In sum, this proposed workshop addresses two core aspects in computer supported learning environments—personalization and collaboration. The workshop provides opportunities for the cross-fertilization of knowledge and ideas from researchers in the many fields that make up this interdisciplinary research area. We hope that the implications of findings of each work presented in this workshop can be used to improve the development of Computer-Supported Personalized and Collaborative Learning environments.

The topics discussed in this workshop will cover a wide range of topics on the captioned workshop. In particular, topics of interest may focus on, but are not restricted to:

- Self-directed learning
- One-to-one tutoring
- Individual trait and ergonomics
- Personalized game-based learning
- Personalized mobile learning
- Learning analytics for understanding computer-supported personalized and collaborative learning
- Emerging technologies supporting collaborative learning in online space
- Group composition and group dynamics in computer-supported collaborative learning
- Collaborative online game-based learning
- Collaborative mobile learning

A draft of the workshop Call for Papers: Please see the attachment.

Short biographies of the workshop organizer:
Dr. Sherry Y. Chen is currently a Chair Professor at Graduate Institute of Network Learning Technology, National Central University, Taiwan and a Visiting Professor in the Department of Information Systems and Computing at Brunel University, UK. Since May 2010, she has been granted an Outstanding Scholar Award from the Foundation for the Advancement of Outstanding Scholarship (FAOS).

Dr. Gwo-Haur Hwang is an Associate Professor and Director at the Department of Information Networking and System Administration, Ling Tung University, Taichung, Taiwan. His main research interest lies within ubiquitous learning and intelligent systems. He obtained his Ph.D. from the Institute of Electronics, National Chiao Tung University, Taiwan.

Dr. Harry Jen-Hang Wang is a Post-Doctor at Graduate Institute of Network Learning Technology, National Central University, Taiwan. His main research interest lies within Computer Support Collaborative Learning. He obtained his Ph.D. from the Department of Computer Science and Information Engineering from National Central University, in 2015.

Dr. Fu-Yun Yu is currently a Distinguished Professor at the Institute of Education, National Cheng Kung University, Taiwan. She obtained her Ph.D. in Instructional Technology from the University of Texas at Austin. Her research interests are learner-centered strategies, adaptable learning space design, and technology-enhanced learning. She has received several awards, including the Wu Ta-You Commemorative Award from NSC in Taiwan, the Outstanding Teacher of the Year from National Cheng Kung University (2006) and the Distinguished Researcher Award from APSCE (2009) among others.

Dr. Robin Chiu-Pin Lin received his Ph.D. degree in Department of Computer Science from National Central University, in 2004. He is currently the Professor and Chair of the Graduate Institute of eLearning Technology at the National Hsinchu University of Education, Taiwan. He is a Visiting Scholar in the CTL (SRI International, USA, 2005 & 2006), LSL (NIE, Singapore, 2007 & 2008) and LSRI (Nottingham, UK, 2009). His research interests include One-to-One Classroom Learning, Computer Supported Collaborative Learning, Web-based Learning and Learning Community, etc. He has published 21 journal papers and over 100 international conference papers.

A list of prospective members of the workshop program committee (tentative):
- George Ghinea, Brunel University, UK
- George Magoulas, Birkbeck Colledge, UK
- Jie-Chi Yang, National Central University, Taiwan
- Chen-Chung Liu, National Central University, Taiwan
- Judy Kay, University of Sydney, Australia
- Nigel Ford, University of Sheffield, UK
- Peter Brusilovsky, University of Pittsburgh, USA
- Yueh-Min Huang, National Cheng Kung University, Taiwan
- Chih-Ming Chen, National Chengchi University, Taiwan
- Ying-Shao Hsu, National Taiwan Normal University, Taiwan
- Chih-Hung Lai, National Dong Hwa University, Taiwan
- Ruey Shieh, Kainan University, Taiwan
- Hsin-Kai Wu, National Taiwan Normal University, Taiwan
- Ming-Fong Jan, Nanyang Technological University, Singapore
- Lung-Hsiang Wong, Nanyang Technological University, Singapore
- Fei-Ching Chen, National Central University, Taiwan

The expected number of attendees:

Although this Workshop will emphasize on Computer-Supported Personalized and Collaborative Learning, it covers an interdisciplinary research topic so we believe that it will attract researcher from various domains, including data mining, user modeling, adaptive media, human computer interaction, learning science, artificial intelligence, computer science, cognitive science, educational technology, etc. Therefore, it is estimated that there will be approximately 20 submissions from which 10-12 will be selected for presentation in the Workshop.

The planned length of the workshop: half day