Centre for the Advancement of Information Technology in Education

The Centre for the Advancement of Information Technology in Education (CAITE) continued to actively promote and conduct research on IT in education in the past few months, noticeably in the following three areas.

Game-based Collaborative Learning Platform

With the great success of "Project-based Learning for Hong Kong–Taipei School Pairs on a Game-based Collaborative Learning Platform" last year, CAITE extended the project this year to Beijing, Guangzhou and Singapore with the support from the Department of Educational Technology of Peking University, as well as Guangzhou and Singapore schools.

To provide students with a chance to get to know their collaborating partners and to exchange views and experiences, an opening ceremony was jointly held successfully by the Bureau of Education of Taipei City Government and CAITE on 16 December 2010 in Taipei Municipal Nangang Elementary School. A total of 150 participants from Hong Kong primary schools and 220 from Taipei attended the ceremony and they were impressed by the ceremony and sharing sessions.

Inquiry Learning

CAITE co-organized the Conference on Digital Game-based Learning 2010, in collaboration with the Chinese Society for Inquiry Learning, Institute of Educational Technology in South China Normal University, and Education Bureau of Foshan. The conference was successfully held on 8–9 December 2010 in Foshan, focusing on the discussion on game-based learning. Over 170 scholars and teachers from Hong Kong, Taiwan, Singapore and the Chinese mainland participated in the conference. Activities included panel discussion, experience sharing sessions, paper presentations and exemplar competition. The conference will be held again in December this year in Beijing.

As for further promoting the use of IT in inquiry learning to the Chinese communities, CAITE was invited to conduct three workshops on the three self-developed educational games (i.e., Farmtasia, Learning Villages, and EagleEye) in Shenzhen in March, April and May respectively.

Research

Prof. Morris Jong, Associate Director of CAITE, conducted a research on "Exploring the Integration of Constructivist Computer Game-based Learning into Formal School Curriculum Teaching". The current deficiencies in the domain of computer game-based learning include: (a) lack of appropriate computer games for formal curriculum teaching in school education; (b) lack of pedagogy for computer game-based learning; and (c) lack of understanding of students' computer game-based learning process. In view of these deficiencies, a three-stage research approach was adopted. Stage I involved the design and technical implementation of an operable pedagogical framework, VISOLE (Virtual Interactive Student-Oriented Learning Environment), for facilitating the integration of constructivist computer game-based learning into formal school curriculum teaching. Stage II involved a preliminary evaluative study on the deployment of VISOLE in 16 schools in the form of a competition. Stage III involved a qualitative case study (with a single-case study approach) for gaining an in-depth understanding of students' learning process in VISOLE in the context of formal school curriculum teaching.

Teachers and students from project schools joining the opening ceremony in Taipei

Prof. Jong presented parts of his research findings in the 3rd IEEE International Conference on Digital Game and Intelligent Toy Enhanced Learning (DIGITEL 2010) and the 18th International Conference on Computers in Education (ICCE 2010). The papers were respectively awarded the Best Paper Finalist Award in DIGITEL 2010 and the Best Paper Award in ICCE 2010.