

GUEST EDITORIAL PREFACE

Special Issue on Technology-Enhanced Social Learning

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With the continued advances in Internet and computing technologies, social learning is becoming a new communication and networking method in education sectors. Social media, such as SNS, microblog, and emerging information and communication technologies, such as searching engine, virtual world platform, and mobile device, provide great opportunities for making social media integral to distributed learning environments.

Social learning has received widespread attention by researchers and teaching staff. The major issue is how to integrate the new technologies with social learning to enhance the learning experience. The purpose of the special issue is to disseminate studies about ways to meet the challenges of this technology, practical experiences on the design of social learning environments, and the current state of system development in academia or industry. The focus of this special issue is on technology-enhanced social learning, which is a timely issue for academics and practitioners who are interested in using new technologies to

enhance social learning, and more specifically, the design and development of effective social learning environments.

This special issue of International Journal of Distance Education Technologies (IJDET) consists of extended and improved manuscripts that were selected and invited from the best papers presented at 2011 International Workshop on Technology-Enhanced Social Learning (TESL2011), which was held in conjunction with the 4th IEEE International Conference on Cyber, Physical, and Social Computing (CPSCom2011) during October 19-22, 2011 in Dalian, China.

All submitted papers of this special issue were double blind peer-reviewed in two rounds, each by at least two reviewers. After the careful reviewing process, five papers have been accepted and published in this special issue. As the guest editors, we believe that this special issue offers a snapshot of current understanding and advancement of how new technologies enhance social learning.

The first paper is titled, “TSI-enhanced Pedagogical Agents to Engage Learners in Virtual Worlds”, by Steve Leung, Sandeep Virwaney, Fuhua Lin, AJ Armstrong, and Adien Dubbelboer. The paper presents a prototypical implementation of a quiz game show called QuizMAster on a virtual world platform, Open Wonderland, with the goal to demonstrate an approach to the development of pedagogical agents to enhance the engagement of students. By using the three dimensions of Transformed Social Interaction (TSI) theory, the paper discusses how to develop the avatars based on the human players’ emotional engagement.

Bin Hou, Hiroaki Ogata, Toma Kunita, Mengmeng Li, Noriko Uosaki’s paper, “PACALL: Supporting Language Learning Using SenseCam”, defines a ubiquitous learning log (ULLO) as a digital record of what a learner has learned in the daily life using ubiquitous technologies, and proposes a system named PACALL (Passive Capture for Learning Log) and introduces SenseCam to help learners record their learning activities unconsciously and help them review captured photos and upload to SCROLL, which was developed to support logging, organizing, recalling and evaluating learners’ learning logs. Usually, learners have to record their learning activities and register them to SCROLL consciously and most of learning chances are lost. However, the PACALL system and SenseCam can help learners record and register their learning activities automatically. Learners won’t miss any learning chances anymore. Besides, it combined GPS to help learners record more information of learning activities and make their learning log more complete. The learners are expected to learn better by using this system.

The third paper, by Chengjiu Yin, Sachio Hirokawa, Jane Yin-Kim Yau, Kiyota Hashimoto, Yoshiyuki Tabata, Tetsuya Nakatoh, describes “Research Trends with Cross Tabulation Search Engine”. This paper proposes a Cross Tabulation Search Engine (CTSE) for junior researchers who are just beginning their research journeys. It is very important for them to conduct a research survey to collect the information required for them to build a knowledge foundation of the field, and using this information to guide the planning

phases of their research projects. This is often a time-consuming process for junior and senior researchers alike. The purpose of their engine is to assist researchers to conduct research surveys, retrieve efficiently and effectively information (such as important researchers, research groups, keywords), and provide analytical information relating to past and current research trends in a particular field. The CTSE system employs data-processing technologies and emphasizes the use of a “Learn by Searching” strategy to support students to analyze research trends, for example, by comparing the number of papers (retrieved by the system) to determine which country has been more actively in the specified research area. The experimental results showed that the system has been helpful to students in conducting research surveys, and the research trend transitions that the system presented were effective for producing research trend surveys. Their study results showed that by using the CTSE system, it was possible that students could gain more knowledge in a particular research field as well as in different research fields, in a short period of time.

In the fourth paper, Yuqin Liu, Guohai Jiang, Lanling Han, and Mingxing Lin describe “Design and Implementation of an Online Auxiliary System for Correcting Japanese Composition”, an online auxiliary error correcting system, which is designed and implemented to provide maximum feedback related to systematic correction for students and teachers. By using the system, the before and after error correction information can be provided for teachers and students such as error type, error frequency, and error variation. The learner corpus and the misuse corpus can also be built and provided for teachers. As we know, there are four basic language skills: listening, speaking, reading and writing. This paper proposed to enhance the Japanese writing ability for language learners. This is a good practice system for supporting teaching and learning foreign language.

The final paper in this special issue is entitled “Technical Feasibility of a Mobile Context-Aware (Social) Learning Schedule Framework” authored by Jane Y-K. Yau and Mike Joy. This paper addresses several issues

relating to the technical feasibility of a certain framework, called mCALS. Some technologies were used to strengthen their framework such as GPS and WLAN. By using a learning schedule to establish a proactive approach for retrieving learners' locations and available time context, appropriate recommendations of materials suitable for students in their learning situation are made.

We hopefully expect that this special issue will contribute much to many researchers involved in social learning and IT in education area. We extend sincere gratitude to all the authors for submitting their manuscripts for this special issue. We would also like to express our appreciations to all the reviewers for their invaluable

time, constructive suggestions and thoughtful suggestions. Finally, we thank the IJDET Editor-in-Chief, Prof. Fuhua Lin, for providing us the opportunity to organize and edit this issue.

Special Issue Reviewers

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