Editorial

Piet Kommers*

Faculty of Behavioral Sciences,
University of Twente,
7500 AE Enschede, The Netherlands
Email: kommers@edte.utwente.nl
*Corresponding author

Margriet Simmerling

Helix5,
Mendelssohnlaan 12,
7522 KP Enschede, The Netherlands
Email: simmerling@helix5.nl

Biographical notes: Piet Kommers is an Associate Professor at the University of Twente, The Netherlands. His specialty is social media for communication and organisation. As Conference co-Cchair of the IADIS multi-conference, he initiated the conferences of web-based communities and social media, e-society, mobile learning and international higher education. He is a Professor at the UNESCO Institute for Eastern European Studies in Educational Technology and Adjunct Professor at the Curtin University in Perth, Australia.

Margriet Simmerling is a Peer Consultant/Senior Manager for R&D projects in the area of e-society and web-based communities. She participated in the advisory board for the Dutch Ministry of Economic Affairs and is active as a reviewer for the European Commission. She designs and moderates e-learning modules and workshops e-learning modules and workshops in the domain of education technology and psychology at the PhD level.

We brought the underlying authors and articles together. Fourteen authors from seven countries (the USA, Jordan, Poland, Russia, Ukraine, The Netherlands and Slovak) inform you about the latest research and developments. The traditional perspective for evaluating ICT's impact is to ask whether the mediated version is more effective and more efficient than the traditional face-to-face mode. In this special issue, we ask a slightly different question: 'The world is online. How does it affect education as well?'

As result, we may expect web-based versions of university courses to introduce learning types and learning merits that have not yet been landed in tests, certificates and even in job competences. In the underlying article 'Students performance between classical and online education: a comparative study', Khalid M.O. Nahar, Mohammed M. Abu Shquier and Izzat Alsmadi display the performance of the students in the traditional classroom setting and the online setting. Their findings are useful for educators and governmental education agencies.

Non-formal learning is an important aspect of 'lifelong learning'. Researchers that are working in this domain find important findings in the article 'Effects of using a peer

support system to optimise knowledge sharing in learning networks: a cognitive load perspective'. Ya Ping Hsiao, Francis Brouns and Peter B. Sloep inform us about the result of a study that was designed to investigate whether extraneous cognitive load can be reduced by applying a peer support system as a support structure. The conclusion contains important indication for future studies in this domain.

We are all aware that there is a difference between general learning and problem based learning. In the article 'Enhancing existing e-learning systems by single and group recommendations', Michal Kompan and Maria Bielikova propose a novel methodology to enhance existing e-learning systems in order to support students' collaborative cooperation (including group recommendations). They conclude that application of e-learning systems supporting collaborative learning is beneficial in such a domain as programming education. Possibilities for future research are indicated.

In the article 'A contribution for the analysis of pedagogical training for teaching in electrical engineering' is based upon a classroom experience and from that point of view is always interesting to see how theoretical insights are applied and what the results are. Marinez Cargnin-Stieler, Marcelo C.M. Teixeira, Rui M. Lima, Diana Mesquita and Edvaldo Assunção observe that a teacher at the beginning of his/her carrier identify other difficulties that a more experienced teacher. Also, the authors pay attention to learning process and the assessment of students. The main conclusion is that teachers can improve their own teaching process by sharing experiences and achievements with the team.

The last two articles are part of the *IJCEELL* special issues we published earlier in 2015 and 2016 together with Eugenia Smyrnova-Trybulska.

In the article 'Traditional and digital personal learning environment in experiences of university students', Irena Pulak presents the results of her research. She also pays attention to the level in which these environments are created in the virtual space, based on digital services.

Teachers play an important role in the educational process. In the article 'Modern education quality requirements and information technologies in academic teachers' activities', Tatiana Noskova, Tatiana Pavlova, Olga Yakovleva, Eugenia Smyrnova-Trybulska and Nataliia Morze conclude that there is a relationship between the quality of e-learning space created by the university and the level of development of the ICT-competence of academic teachers. In the conclusion, five recommendations are presented.