Guest Editorial Preface

Special Issue on Challenges and Opportunities in eLearning:
View of IT Academics

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The IT world is changing rapidly. To keep their knowledge and abilities up to date there is a need for professionals, managers and researchers in the IT field for permanent education. Training on the job and by courses in and outside the company requires a lot of time, resources and planning to take part in such courses. Open and online training provides courses anytime, anywhere. Recently we observed an enormous grow in available open and online courses. Not only the quantity but also the quality of available open and online courses has been increased. The latest development in this area are the development of Massive Open and Online Courses MOOCs. Famous Universities as MIT, HARVARD offer many of their regular courses for free via the edX consortium. E-learning provides IT-specialist to take selected courses on time and places of their choice. Via this network of e-learning IT-specialist are able to increase their knowledge and develop their competences.

In this special issue researchers involved in the European Thematic Network on Future Education and Training in Computing (FETCH) present recent developments in the area of open and online learning. Via research papers they report about the outcomes of their recent research and experiments. Some of the objectives of the FETCH-project are to raise the quality of education of IT specialist through introducing modern information and communication technologies in education and to develop new didactical theories and learning models for using social media in education.

In their paper entitled "Cloud Storage Privacy and Security User Awareness: A Comparative Analysis between Dutch and Macedonian Users", Adriana Mijuskovic and Mexhid Ferati researched factors influencing the user awareness level of privacy and security concerns when storing data on the cloud. One such factor is the users' cultural background. Computer Science students and employees working in different software companies in the Netherlands and Macedonia, were requested to take part in an online survey. The comparative analysis indicates that Dutch compared to Macedonian users in general have higher level of awareness regarding the privacy and security of cloud storage.

In the paper "FCE: A framework for curriculum evaluation", Hilda Tellioğlu considers static and dynamic aspects of curricula in an attempt to conceptualise the scope of an evaluation framework for curricula in higher education., the Framework for Curriculum Evaluation (FCE) is presented with its two levels: definition level and execution level. For the execution level the questionnaires used for students, teachers and administration staff are briefly presented. Some of the questions are exemplified to demonstrate the use of FCE in real settings.

The paper "Big five personality in online learning and games: analysis of students activity" of Peter Krátky, Jozef Tvarožek and Daniela Chudá discusses the use of students' personality profile and preferred learning style. The goal was to adapt learning content and activities in order to provide the best possible experience for individual students. The data used to evaluate were collected from an online learning environment used in university programming courses over the course of several years.

In their paper "Creating Student Interaction Profiles for Adaptive Collaboration Gamification Design", Antti Knutas, Jouni Ikonen, Dario Maggiorini, Laura Ripamonti, and Jari Porras, researched how collaborative learning and gamification methods can be used in an optimal setting. Gamification preferences profiles were assessed to create adaptive gamification approaches for online learning or collaborative learning environments. Possibilities to use this approach in online learning environments are discussed.

The paper "Partial Solution for a Problem of Developing a Large Number of eLearning Resources", Zoran Putnik, Mirjana Ivanović, Zoran Budimac, and Klaus Bothe discusses how a careful organization of the teaching curriculum at their Department resulted in an excellent cooperation between students and lecturers. Students were introduced to principles and methodology of eLearning in some real situation, preparing some practically usable material, thus being able to see all of the problems they might encounter in the future. As a result, lecturers received a lot of draft versions of teaching materials to improve it further, thus relaxing efforts for eLearning material creation.

The paper "An Experience of Running a MOOC on Information Technology" of Valentina Dagiene, Danguole Rutkauskiene, Daina Gudoniene is about designing and running a massive open online course (MOOC) used in Lithuanian course "Information technologies" for learners of all levels. The main problem of this course relates to lack of qualified and experienced teachers who could have time for providing a high-quality massive open online course for learners. The presented quantitative research on the basis of respondents' answers to a survey questions can help designers and teachers to improve their courses.

The goal of the paper "Architecture of Combined e-Learning Environment and Investigation of Secure Access and Privacy Protection" from Radi Romansky and Irina Noninska, Technical University of Sofia, Bulgaria is to present an idea to combine traditional e-learning technologies with new opportunities that give mobile applications, cloud services and social computing. These technologies can endanger data security since they make possible remote access to resources, sharing information between participants by network communications. In order to avoid data vulnerabilities users must be identified and authenticated before, i.e. to be allowed to access information resources otherwise integrity and confidentiality of e-learning system could be destroyed. In order to propose solution basic principles of information security and privacy protection in e-learning processes are discussed in this article.

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