Young Academics in E-Learning Research - Editorial

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Abstract—The special track "Young Academics in E-Learning Research", shortly YAER2012, took place within the "International Conference on Interactive Collaborative Learning" (ICL 2012) in Villach, Austria. The conference slot aims to invite young researchers in the field of Technology Enhanced Learning (TEL) to present their thesis or ongoing work. We asked for contributions, which address the interdisciplinary research field. YAER 2012 provided an excellent space for discussions in order to improve learning and teaching of tomorrow. Education without technology seems to be nearly impossible and this issue helps to increase the impact of technology for learning.

Index Terms—Editorial, Technology Enhanced Learning, Young Academics, E-Learning

I. INTRODUCTION

Computer Based Training (CBT), Web Based Training (WBT), Computer Supported Collaborative Learning (CSCL), E-Learning, Blended Learning are keywords of the last three decades, pointing out that the use of technology for learning and teaching is increasing arbitrarily. Today web technologies and digital devices with access to it represent most of this used educational-technology. Furthermore till the announcement of Web 2.0 by Tim O'Reilly [1] and the consequent continuation for educational purposes, called E-Learning 2.0 [2], the former young research field keep growing on. Today we are addressing the use of Social Media for [3] and the influence of the Semantic Web on TEL [4]. Researchers are wondering if we have to educate the so called Digital Natives [5] in another way and how the invention of new digital devices changes the learning behavior. Mobile Learning and Learning Analytics are two trends named by the Horizon Report [6]. Due to the fact that the World Wide Web is the drive of a worldwide network for exchanging and sharing content Open Educational Resources are playing an essential part [7]. Finally the upcoming open online courses, called Massive Open Online Courses (MOOC), delivering education for anyone who is interested in it [8]. It can be summarized that the research filed of Technology Enhanced Learning is one of the most increasing ones.

In consequence the special track "Young Academics E-learning Research" addresses the work of our new blood. Especially the up growing population who deals for the first time with the Internet since their youth helps to bring new insights. Due to the fact that this kind technology is a daily part of their life it becomes ubiquitous. The Austrian association for new media (Forum Neue Medien in der Lehre Austria, shortly fnma) asked for contributions on "E-learning research done by young researchers" to foster the exchange of innovative approaches and research results in a highly interdisciplinary field:

E-Learning or Technology Enhanced Learning as well as research about the usage of New Media in especially Higher Education is one of the three key aspects of the association for new media Austria. The executive committee likes to bring together related work in the field of Higher Education and to offer a possibility for exchange of exciting research results. Due to the fact that we think that also young people need a chance for presenting their work to a broader community, we invited students and young researchers to send us research results of their master thesis, PhD-work or similar projects. The call for papers had no restrictions in any directions, even more we like to show the broad and interdisciplinary field. Finally only contributions based on students' works were accepted.

In this special track, we brought together new and innovative approaches, applications and experiences related to the research field of Technology Enhanced Learning. Accepted contributions are addressing one of the invited topics:

- Research in e-Learning technologies
- Evaluation studies of various e-Learning settings
- Empirical studies for usage of new media in Higher Education
- E-Books
- Social Media in e-Learning
- E-Learning environments
- Mobile Learning
- Game Based Learning
- Digital Natives and learning
- E-Assessment
- Podcasting for learning (Educasting & Vodcasting)
- Open Educational Resources (OER)

II.   THIS ISSUE

The six papers finally selected to be part of this special issue are following briefly described.

A.   Ubiquitious Personal Learning Environment

Personal Learning Environments are a booming research field since years now. Graz University of Technology is one of only few universities offering such an environment to their students and staff. The switch to a more learner-centered framework is described as well as first statistical date of the usage. Finally a converter is presented who allows the usage of browser based learning widgets also on today's smartphones. This leads to the described ubiquity.

B.   Towards identifying Collaborative Learning Groups using Social Media

In this publication a semantic approach is described which should help to find learning groups for further collaboration. Based on the microblogging platform Twitter a data-mining algorithm identifies users who have something in common. Based on the content users are producing and consuming a pre-selection is done for different clusters of learning groups. It can be shown that a recommender system using social network metrics is a promising success factor to the future of education.

C.   A Semantic Approach to Cross-Disciplinary Research Collaboration

Collaboration is marked as one of the most important tasks for experts in future. Therefore it would be from great interest to provide an application based on semantic technologies, which is able to extract reliable information from Social Networks or other Web 2.0 tools. A model for presenting both structured and unstructured research data is proposed which should be the bases for further research work.

D.   A unique, culture-aware, personalized learning enviornment

In this publication current learning systems are addressed towards the idea of multi-dimensional system. Due to the fact that systems are closed applications a model is developed to bring more personalization in the field of technology enhanced learning. Finally also the problem of cultural diversity is pointed out and its influence towards personal learning environments.

E.   Impact factors for learner motivation in Blended Learning environments.

Media cannot improve learning itself because it is a task each learner has to do for him/herself. But one of the crucial factors, which influence learning is motivation, therefore it must be thought about parameters which help to increase motivation. This field study with more than 170 students pointed out the importance of the performance of a Learning Management System as well as further local parameters at school.

F.   Teaching E-portfolios in Teacher Education

E-portfolios are a possibility to document the personal and individual student progress. In consequence such a tool can be used for mentoring young teachers in their induction phase. The article points out how portfolios can be used in teacher education and further teaching trainings.

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