
Editorial

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Biographical notes: Rosella Gennari is a researcher at the Faculty of Computer Science in Bolzano. She obtained a PhD in Computer Science at the University of Amsterdam, a post-doc ERCIM fellowship at CWI, Amsterdam, in 2002, and 3-year post-doc fellowship at FBK-irst, Trento, in 2002. At the beginning of her career, she published in relevant venues in automated reasoning, working on modal logic and constraint satisfaction. In the latest seven years, her research interests moved towards mixing automated reasoning

technologies and human computer interaction methods, applying them to the design of accessible and usable technology enhanced learning (TEL) artefacts, in particular, games, starting from the real needs of users, such as deaf users.

Pierpaolo Vittorini obtained a PhD degree in Computer Science at the University of L'Aquila, and a master's degree in management of health systems. He is currently a researcher of the Department of Life, Health and Environmental Sciences, and teaches applied computer science, medical informatics, and information systems at the Faculty of Medicine. He has published more than 60 papers in peer-reviewed journals and international and national conferences. His research interests range from data models for biomedical sciences, XML databases, sanitary information systems and expert systems.

Ivana Marenzi, throughout her career, has specialised in the relationship between technology and communication. After her initial experiences as an ICT technician at the University of Pavia (Italy), she joined the L3S Research Center of the Leibniz University of Hanover in Germany (www.L3S.de) as part of her PhD programme on the interplay between CLIL (*Content and Language Integrated Learning*) and Web 2.0. During the past four years she has worked as educational technologist. Her main area of research in Technology Enhanced Learning includes the support of collaborative and lifelong learning.

Tania Di Mascio is an Assistant Professor at the Information Engineering, Computer Science and Mathematics (DISIM) of the University of L'Aquila. She obtained a PhD degree at the DIEI of University of L'Aquila, working on Human Computer Interaction. From 2006 to 2010, she worked at different research institutes. Her primary research activities are in HCI, user interfaces usability and accessibility, and TEL, with focus on information visualisation and interaction paradigms. She is author or co-author of more than 50 papers in peer-reviewed journals and international and national conferences. She is in the Steering Committee of MIS4TEL and EBUTEL.

Fernando de la Prieta Pintado took an undergraduate degree and MSc in Computer Science from the University of Salamanca. Currently he is finishing his doctorate studies also at the University of Salamanca. His research focuses on multi-agent systems, virtual organisations, distributed systems and educational technology. He published articles in prestigious national and international journals and conferences, and he participated in different research projects both at a national and European level.

Juan Manuel Corchado is a Spanish computer scientist, professor, researcher and author. He is Vice President for Research and Technology Transfer since December 2013 and Full Professor with Chair at the University of Salamanca. In addition to a PhD in Computer Sciences from the University of Salamanca, he holds a PhD in Artificial Intelligence from the University of the West of Scotland. He is the Director of the BISITE Research Group, President of the IEEE Systems, Man and Cybernetics Spanish Chapter and Academic Director of the Institute of Digital Art and Animation of the University of Salamanca.

Successful Technology Enhanced Learning (TEL) products are accessible, usable *and* pedagogically effective. Designing TEL products that meet all such goals requires diverse types of expertise, orchestrated by methodologies that base design decisions on empirical evidence and the involvement of real users. This *IJTEL* special issue looked for

contributions that describe how existing empirical evidence or the involvement of real users in the design process allowed TEL researchers to produce accessible, usable and pedagogically effective TEL products.

The issue sought contributions of authors of the best papers presented at the 2nd International Workshop on Evidenced-based Technology Enhanced Learning of 2013 (ebTEL 2013), launched under the collaborative frame provided by the European FP7 TERENCE project (www.terenceproject.eu), and recently evolved into the conference on Methodologies and Intelligent Systems for Technology Enhanced Learning (MIS4TEL 2014). The issue was also widely advertised so as to intercept novel work, relevant and not yet published at ebTEL 2013.

The acceptance rate of this issue was circa 50%. A number of submitted papers were of good quality and, as editors, we faced the hard challenge of choosing which papers to keep and which to discard. After some debate, as guest editors, we chose to accept those that were definitely relevant for the issue scopes, even though this meant sacrificing others that were marginally relevant but still of good quality. We hope that the reviewers' comments were helpful also for the authors of these papers.

This *IJTEL* issue, in the end, brings together contributions concerning the design and evaluation of TEL systems with studies of educators, education stakeholders or education psychologists that aim at improving their students' learning experience. The majority of accepted contributions report on the design and evaluation of accessible and usable TEL solutions. The remaining contributions describe evidence-based TEL interventions, studies with real users and guidelines for users with special needs.

No journal issue, no proceedings, no good scientific work could ever be possible without the work of careful and skilled reviewers. This is particularly true for this *IJTEL* issue: reviewers did an extensive review work; debate, at point, reached high peaks but was always constructive. Last but not least, we must make a shameful confession: we stressed our reviewers beyond the impossible and insisted on them to stay within very tight deadlines. We feel thankful to them for coping with our deadlines, and for putting up with us.

The *IJTEL* editors and staff were also helpful with our requests till the very last day. Thank you, all, for your assistance and timely advice.

Now, when our work as guest editors is over, we leave in readers' hands a special issue that was bred on several seeds, in which we firmly believe: interdisciplinarity, empirical studies, sound design principles, and real people. We hope that readers will enjoy reading this multi-facet special issue, dedicated to the evidence-based and user-centred design of TEL, as much as its guest editors did.