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International Workshop on Evidence-Based Technology Enhanced Learning

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Preface

Research on Technology Enhanced Learning (TEL) investigates how information and communication technologies can be designed in order to support pedagogical activities. The Evidence Based Design (EBD) of a system bases its decisions on empirical evidence and effectiveness. The evidence-based TEL workshop (ebTEL) brings together TEL and EBD. The workshop proceedings collects contributions concerning evidence based TEL systems, like their design following EBD principles as well as studies or best practices that educators, education stakeholders or psychologists used to diagnose or improve their students' learning skills, including students with specific difficulties (e.g. poor/slow readers, students living in impoverished communities or families).

The ebTEL'12 workshop was launched under the collaborative frame provided by the European TERENCE project (<http://www.terenceproject.eu>). The TERENCE project, n. 257410, is funded by the European Commission through the Seventh Framework Programme for Research and Technological Development, Strategic Objective ICT-2009.4.2: ICT: Technology-enhanced learning. TERENCE is building an AI-based Adaptive Learning System (ALS) for reasoning about stories, in Italian and in English, through reading comprehension interventions in the form of smart games. The project also aims at developing innovative usability and evaluation guidelines for its users. The guidelines and the ALS will result from a cross-disciplinary effort of European experts in diverse and complementary fields (art and design, computers, engineering, linguistics and medicine), and with the constant involvement of end-users (persons with impaired hearing and their educators) from schools in Brighton (Great Britain), and from Veneto region (Italy).

The ebTEL workshop invited authors in the area of TEL, both from computer science as well as evidence-based medicine, educational psychology and pedagogy. In this manner, the international ebTEL'12 workshop wants to be a forum in which TEL researchers and practitioners alike can discuss ideas, projects, and lessons related to ebTEL. The workshop takes place in Salamanca, Spain, on March 28th-30th 2012.

This volume presents the papers that were accepted for the first edition of ebTEL. The full program contains 16 selected papers (3 in the Psychology and Pedagogy Track and 13 in the Information and Communication Technology Track) from 6 countries (Germany, Italy, Romania, Saudi Arabia, Spain, United Kingdom, USA). Each paper was reviewed by, at least, two different reviewers, from an international committee composed of 27 members of 5 countries. The quality of papers was on average good, with an acceptance rate of 76.2%.

We would like to thank all the contributing authors, the reviewers, the sponsors (IEEE Systems Man and Cybernetics Society Spain, AEPIA Asociación Española para la Inteligencia Artificial, APPIA Associação Portuguesa Para a Inteligência Artificial, CNRS Centre national de la recherche scientifique and STELLAR), as well as the members of the Program Committees, TERENCE members and the Organising Committee for their hard and highly valuable work. Special thanks are due to Wolfgang Nejdl of the L3S Research Center of the University of Hannover (Germany), invited speaker of the workshop with the talk “Web Science @ L3S – Interdisciplinary Research Challenges”. The work of all these people contributed to the success of the first edition of the ebTEL’12workshop. Thank you all for your help, ebTEL’12 would not exist without your contribution.

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