The 11th International Conference on Cognition and Exploratory Learning in Digital Age was held in Porto, Portugal, October, 25-27, 2014.

The CELDA 2014 was organized by the International Association for Development of the Information Society (IADIS) and endorsed by the Japanese Society for Information and Systems in Education (JSISE).

**Endorsed by:**

The CELDA 2014 Conference purpose was to address the main issues concerned with evolving learning processes and supporting pedagogies and applications in the digital age. There had been advances in both cognitive psychology and computing that have affected the educational arena. The convergence of these two disciplines is increasing at a fast pace and affecting academia and professional practice in many ways. Paradigms such as just-in-time learning, constructivism, student-centered learning and collaborative approaches have emerged and are being supported by technological advancements such as simulations, virtual reality and multi-agents systems. These developments have created both opportunities and areas of serious concerns. This conference aimed to cover both technological as well as pedagogical issues related to these developments. Main tracks have been identified. However innovative contributions that do not easily fit into these areas were also considered as long as they were directly related to the overall theme of the conference – cognition and exploratory learning in the digital age.

The main tracks for submissions were: Acquisition of expertise, Assessing progress of learning in complex domains, Assessment of exploratory learning approaches, Assessment of exploratory technologies, Cognition in education, Collaborative learning, Educational psychology, Exploratory technologies (such as simulations, VR, i-TV and so on), Just-in-time and Learning-on-Demand, Learner Communities and Peer-Support, Learning Communities & Web Service Technologies, Pedagogical Issues Related with Learning Objects, Learning Paradigms in Academia, Learning Paradigms in Corporate Sector, Life-long Learning, Student-Centered Learning, Technology and mental models, Technology, learning and expertise and Virtual University.

The CELDA 2014 Conference received 78 submissions from more than 20 countries. Each submission was reviewed in a double-blind review process by at least two independent reviewers to ensure quality and maintain high standards. Out of the papers submitted, 25 were accepted as full papers for an acceptance rate of 32%; 17 were accepted as short papers and 2 were accepted as reflection papers.
Authors of the best published papers in the CELDA 2014 proceedings were invited to publish extended versions of their papers in:

- A book from Springer
- A special issue of an International Journal: Technology, Knowledge and Learning

In addition to the presentation of full papers, short papers and reflection papers, the conference also featured a keynote presentation and a Panel Session.

**Keynote Presentation:**

“DESIGNING LEARNING ENVIRONMENTS IN A DIGITAL AGE: THE QUEST FOR WHAT TO CONSIDER”

by Professor Jan Elen, Faculty of Psychology and Educational Sciences, K.U. Leuven, Belgium

**Conference Panel:**

“COMPETENCIES, CHALLENGES, AND CHANGES: A GLOBAL CONVERSATION ABOUT 21st CENTURY TEACHERS AND LEADERS”

by Lynne Schrum, Rose Dolan, Dirk Ifenthaler, Ronghuai Huang, Dale Niederhauser and Neal Strudler.


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