
Editorial

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Biographical notes: Niki Lambropoulos is an experienced Research Project Manager, a scientific and technical project coordinator, an HCI education e-learning expert, Researcher, Consultant, HCI Designer and Researcher, and Online Communities Manager. Her interests fall in the fields of European projects management, human-computer interaction education, e-learning, open innovation, idea management for distributed leadership and user innovation networks. She currently works as the Director for the Department of European Projects for the Regional Directorate for Primary and Secondary Education in Western Greece and as a Senior Researcher at the Wire Communications Laboratory, the Electrical and Computer Engineering Department, University of Patras, Greece.

Margarida Romero is the Associate Director of E-learning (ESADE Law and Business School) and Associate Professor at the Universitat Autònoma de Barcelona and Universitat Oberta de Catalunya. Her actual interest is Computer supported collaborative learning (CSCL) and the study of the time factor in self and co-regulated learning contexts. She leads the Euro-CAT-CSCL research project within the FP7 Marie Curie IAPP actions, and won the Artificial Intelligence French Association Award in 2006.

Piet Kommers is an Associate Professor at the University of Twente, The Netherlands. His actual interest is media, learning and visual communication. His Master study in 1980 is on formulated algorithms for adaptive learning. In his PhD study, he questioned how conceptual representations may support the cognitive integration in learning. He was the Scientific Director of NATO Advanced Research Workshop: 'Cognitive Technologies' in 1989.

Creativity is a human value that has been recognised as a key factor not only for economic growth but also for the physical survival of the society. Many innovative products are now created by teams and organisations and implemented in real life settings. For example, the internet itself is a network of individual creative contributions by collect/relate/create/donate (Shneiderman, 2002). Consequently, the involvement of users constructing a shared context aims to exchange ideas and experiences and consequently affects the insights of the other members. For Harper and colleagues (2008) such collaborative creativity is a characteristic that makes us essentially human and is essential to continue manifesting with technology. In today's crisis, the enhancement of personal, community as well as corporate innovation and creativity through new technologies are seen as an opportunity to overcome the economic difficulties (UN International Telecommunication Union, 2009).

Computing pioneers such Engelbart (1963) supported the use of the machine for the 'augmentation of human intellect'. Similarly, Shackel (1991) suggested that the designers need to enable human's capabilities, and Mumford (1983) used socio-technical systems design in order to maximise human gains. Shared spaces enhance collaborative creativity by creating greater challenges and provoke a need to exploit human skills and experiences empowered by information technology. Computer-enabled creativity and open innovation means that people can become consumers, creators, producers, programmers or publishers as well as users. Decentralised and interlinked user-innovation platforms, mash-up and Web 2.0 tools now support extensive enquiries for further analyses and syntheses enabling creative authoring, designing, learning, and playing. This proliferation of applications that allow such co-creation sometimes generate the phenomenon of multiple data sources and services pulled together to produce new applications, services as well as knowledge. Such co-creative engagement has been enhanced by entirely new applications; in result, the distinction between designer and user is harder to draw (Harper et al., 2008). Thus, new possibilities arise for idea creation, innovation and problem solving; in this way, we shape the tools and they in turn shape us (Griffin, 1991).

Consequently, designing shared contexts for co-creative engagement can support quality in communication to elicit and articulate opportunities and challenges and provide tuned solutions for everyone. This involves systematic design procedures to ensure creative collaboration on all levels as well as taking into account the negative effects of such enterprises. Web-based communities, in contrast to web-based resource sharing in general, target the larger bandwidth between human actors like individuals, groups and between individuals and groups.

This special issue reports first experiences and debates, but also goes beyond the current state of the art by looking at future prospects and emerging applications.

The first case study by Alison Hsiang-Yi Liu and Jonathan P. Bowen refers to the exploitation of Web 2.0 tools in museums. The authors report results from the use of the Object Wiki from with the Dan Dare exhibition at the Science Museum in London as

well as the ways knowledge developed within a community of practice. In this way, the curators encouraged visitors to actively participate in the exhibition not only based on their personal knowledge about the artefacts but also enriching the current knowledge of the museum.

The second study by Margarida Morais Marques, Maria João Loureiro and Luís Marques presents the collaborative work within a community of teachers and researchers in Portugal as part of the project 'Investigação e práticas lectivas em Educação em Ciência: Dinâmicas de interação' (IPEC). The project aimed to develop innovative practices in formal education; the community members developed, implemented, and evaluated curricular modules about sustainability.

The third reported case study by Tina Wilson and Patrick McAndrew refer to community building tools and open educational resources (OER). The authors explored the way the tools can be used in conjunction with available content to create a shared space that could improve the impact of educational resources in open environments. Using both collaborative and cooperative working methods, the academics provided insights on the ways social tools and techniques in open arenas can be used for formal and informal learning.

The fourth submission by Jill Jameson explores the role of leadership in fostering trust, creativity and effective learning in shared spaces aiming to build and sustain e-learning communities. The author argues about the role of leadership in establishing trust and positive ethos despite the fact that is not widely researched and recognised. She proposes that both the semantic and technological advancement need to include collaborative leadership to encourage and support collaborative creativity.

The fifth paper by Marlies Bitter-Rijkema, Peter B. Sloep, Rory Sie, Peter van Rosmalen, Symeon Retalis and Mary Katsamani refers to the effective collaborative creativity for sustainable production of innovative products and services. The authors stress the need for team work among specialists from different disciplines to tackle the technological nature and complexity of the innovations. They present the idSpace platform, a collaboration platform integrating a variety of creativity tools with pedagogy-based guidance to target knowledge-sharing strategies for collaborative creativity.

The sixth paper by Adam Westerski, Carlos A. Iglesias and Tadhg Nagle investigates the idea generation and management within the idea life cycle from a socio-economic viewpoint. The authors propose that the individuals within a community can be aided and engaged in the creative process by an emerging software component, the idea management system. Such shared space may enable innovative ideas to be grouped, categorised and managed towards a final product for organisations or enterprises. They also shed light into the dependencies between the collective content and the enterprise processes occurring within the system to maximise the community-based innovation and the associated benefits for all.

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