

PREFACE

Smart Learning Ecosystems and Regional Development

The opportunities for learning are becoming ever more connected as they are mediated by different technologies. This issue explores, from a number of perspectives, how to create and evaluate Smart Learning Ecosystems, those which support and adapt to the needs of learners and make use of modern, technology driven environments such as those emerging within smart cities.

In ‘Participatory bottom-up self-evaluation of schools’ smartness: an Italian case study’ and ‘An investigation of actors’ differences in the perception of learning ecosystems’ smartness: the case of University of Aveiro’, the authors explore the requirements for a smart learning ecosystem, how can they be measured and – most critically – how do the learners themselves perceive the learning opportunities. On a university campus, how does this change by the different actors of the university?

Open data is a commonly cited source to support learning across a smart environment. ‘Citizen-driven dashboards in smart ecosystems: a framework’ and ‘Data Profiling in a Mobile Touristic Augmented Reality Application for Smart Environments based on Linked Open Data’ look at open data from two complementary perspectives, firstly as a material for supporting citizen engagement in solving smart city problems and next as a resource for creating smart tourist applications.

Workplace learning is the focus of the next set of papers, ‘Guidelines for developing educational environments in the automotive industry’ and ‘The Use of Information Communication Technologies for Staff Continuous Professional Development in Organizations. The case study’. How does a smart workplace support employees in continued development of skills? How can e-learning solutions be scalable, yet be tailored to provide specialist knowledge as required?

Novel ways to annotate digital web content for richer interactive experiences is the focus of the paper ‘External Resource Annotation Framework and its applications in E-learning’. Novelty is also the focus of the final paper ‘An Agent-based Approach for Simulating Transformation Processes of Socio-ecological Systems as Serious Game’. This paper explores a game-like visual interface to engage the public with the complexities of socio-ecological systems and the impact of choices over land-use.

We hope that the papers included in that special issue of IxD&A will contribute to promote discussion and reflection on how relevant are smart learning ecosystems for regional development and social innovation. The exchange of opinions should include researchers, policy makers, entrepreneurs and citizens, as final receivers and beneficiaries of the technologically enabled instruments that can foster their engagement with learning ecosystems and community development.

We strongly believe that further integration of ICT and social innovation will contribute to economic development and will create new policies for smarter proactive citizens.

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