Editorial

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Recent research has motivated the integration of knowledge management with e-learning. Given an intimate connection between the two fields, the high potential for synergies between them seems obvious. To facilitate the synergy, there is a need to understand and clarify the rationale of integrating knowledge management with e-learning.

Learning is more than consuming knowledge. The grant challenges to learning in knowledge societies are not limited to how effectively helping learners to acquire knowledge and skills, but in helping them to learn how to manage, work creatively with ideas and to contribute to the creation of new knowledge. By integrating knowledge management with learning practice, the understanding of education will be dramatically extended towards lifelong learning, particularly when linked to dynamically changing public and organisational knowledge repositories.

Learning and knowledge management share a common strategy of creating a learning organisation. The organisational learning theory implies that learning should be noted beyond individual level; an organisation should be able to continuously and effectively learn and adapt to the environment. Learning and sharing knowledge are equally important to build an organisation's intellectual asset. The integration of learning and knowledge management will make a real contribution to improve individual, group and organisational performance by knowledge dissemination.

The integration of learning and knowledge also raises the question of the competences of e-learning initiatives traditionally associated with the design of learning resources. Is the creation of learning resources the whole solution to e-learning, or is it more the creation of learning environment enabling learners engaged in learning processes for active construction and contribution of knowledge? How will future approaches to e-learning reflect this, and how will learning technologies contribute? This special issue aims to stimulate the investigation on the nature and future of knowledge management and e-learning.

In the first paper 'Effective ontology management in virtual learning environments', Matteo Gaeta, Francesco Orciuoli, Stefano Paolozzi and Pierluigi Ritrovato present a set of ontology-based methodologies and techniques for building a semantic knowledge and virtual learning environment, with a view to providing customised and contextualised learning experiences. The focus of this work is positioned on the reuse and merging of different ontologies for the same knowledge domain.

Some significant organisational and culture issues stand in the way of a combined learning and knowledge management function. Various technological, social and pedagogical issues have to be considered in a holistic way. The paper by Davoud Masoumi and Berner Lindström, entitled 'Foundations of cultural design in e-learning', identifies and analyses the social and cultural dimensions to the design and use of ICT in e-learning environments. The investigation is based the authors' experiences in eastern contexts like Iran.

In relation to this, Xi Zhang, Zhenjiao Chen, Doug Vogel and Chuanjie Guo report a field study based on their Hong Kong/Netherland virtual project programme among universities. Their paper 'Exchange Ideology as a moderator of Knowledge Sharing in virtual teams: a social exchange theory perspective', investigates how individual exchange ideology influences the relationship between perceived economic and social benefits and knowledge sharing behaviour in the context of virtual teams.

While the conceptual link between e-learning and knowledge management is becoming clear, the technologies underpinning both are emerging. It is the use of web technologies that provides a common medium to combine the practice. In their paper 'The socialisation of organisational learning through learning technology', Gavin J. Baxter, Thomas M. Connolly and Mark Stansfield investigate how the social aspects of learning technologies have the potential to support the social processes of organisational learning. The investigation focuses on a particular industry, the IS

organisations, which are continuously involved in undertaking information systems projects.

In the last paper of the special issue, Jian Liao, Minhong Wang, Yanyan Li and Ronghuai Huang address the use of data mining technology to discover knowledge from large-scale and real interaction data in collaborative learning communities. Their paper, 'An investigation into knowledge discovery in collaborative learning communities', investigates the dimensions of knowledge to be discovered in collaborative learning communities, as well as the principle and process of the proposed knowledge discovery approach. A case study of role discovery in collaborative learning groups is explored to demonstrate the usefulness of the approach.

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