Current challenges in learning design and pedagogical patterns research

Symposium Organiser, Gráinne Conole Open University, UK. <u>g.c.conole@open.ac.uk</u>

Introduction

The goal of this symposium is to bring together experts in learning design and pedagogical patterns research to exchange their current views on learning design as well as their experiences in evaluating the application of their proposed approaches in practice. Four papers are included, which between them they cover different aspects of the following three themes: i) Approaches to visualising and representing design patterns, ii) Computational representation of enacted patterns and iii) Analyses of emerging enacted patterns. In particular we are interested in exploring how can designs be represented, shared and discussed, and how they might be used and by whom. The first paper acts as a position paper in relation to the remaining four. It provides an overview of different types of design aspects around creativity and collaboration. Collaborative design is also picked up in the third paper, but in the context of pedagogical patterns. The final paper looks at issues to do with sharing and discussing designs and puts forward a number of theoretical frameworks for understanding new emergent practices in web 2.0 spaces. The symposium will use the content of the papers as a basis for exploring the three themes and will attempt to draw out new insights into addressing these questions.

Modern networked learning environments have the potential to enhance significantly the student learning experience; offering new ways in which they can communicate and interact with each other and with their tutors. However, the sheer variety of new technologies available now is bewildering. Those tasked with designing learning experiences need new forms of guidance to take advantage of the affordances of new technologies and to make pedagogically informed design decisions. The learning design and pedagogical patterns research fields that have emerged in recent years are attempting to provide solutions to these issues. Learning design research is concerned with articulating and representing the design process and providing tools and methods to help designers in their design process (Lockyer et al., 2008). Pedagogical patterns research is concerned with elicited empirically derived good practice and representing that within a standard format according to the underlying pedagogical pattern principles (Retalis and Goodyear, forthcoming). This series of papers provides a snapshot of current thinking in these fields. The symposium will aim to draw out some common synergies across these fields. These fields are related, but distinct from instructional design research (Spector et al., 2008; Reigeluth et al. 2009); learning design because of its emphasis on the holistic design process and its alignment to a socio-cultural perspective and pedagogical patterns in terms of its derivation from Alexander's work in Architecture.

Designing effective technology-enhanced learning environments in an efficient and affordable way is a demanding task, which requires creativity and a significant amount of expertise [Goodyear, 2002]. On the one hand, people new to e-learning design need advice from experts, experienced peers, and users so as to avoid investing a large amount of resources in 're-inventing the wheel' or in creating solutions that may be educationally ineffective. On the other hand practitioners, instructional designers and content experts need to effectively collaborate for the joint development of learning designs thus leading to an increase of the quality of e-learning provision across Europe. Currently, several initiatives have been set up and a lot of attempts have been made in order to explore conceptualizations of learning designs such as IMS LD, educational modelling languages like EML, learning flow design patterns, pedagogical patterns and of course visual tools for creating learning designs. The learning design research community faces a big challenge: to find powerful ways of providing structured, teacher-friendly, formalized and visual representations of learning designs.

References

- Goodyear, P. (2002). Teaching online. In Hativa, N & Goodyear, P, eds (Ed.), *Teacher Thinking, Beliefs and Knowledge in Higher Education* (pp. 79–101), Dordrecht, Netherlands: Kluwer Academic Publishers.
- Goodyear, P. & Retalis, S. (Eds.) (in press) Technology-enhanced learning: design patterns and pattern languages, Rotterdam, Sense Publishers.
- Lockyer, L., Bennett, S., Agostinho, S. and Harper, B. (2008), Handbook of research on learning design and learning objects, New York: Information Science Reference.
- Reigeluth, C.M. and Carr-Chellman, A.A. (Eds) (2009), Instructional-Design Theories and Models, Volume III, Building a Common Knowledge Base. New York: Routledge.
- Spector, M.J., Merrill, M.D., Van Merrienboer, J. and Driscoll, M.P. (Eds) (2008), Handbook of research on educational communications and technologies, Third Edition, New York: Taylor and Francis.