

Chapter XIX

A Visual Learning Design Representation to Facilitate Dissemination and Reuse of Innovative Pedagogical Strategies in University Teaching

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ABSTRACT

This chapter describes a visual learning design representation devised in an Australian funded project that focused on identifying and describing innovative educational practices employing the use of information and communication technologies (ICT). Referred to as the learning designs project (www.learningdesigns.uow.edu.au), the aim was to produce generic learning design resources and tools to help academics in higher education implement innovative ICT-based learning designs in their own teaching contexts. The chapter describes the learning designs project, details how and why the graphical learning design representation was created and provides an example to illustrate the visual formalism. How the authors have built on this work since the completion of the project is also discussed. The purpose of this chapter is to explain how this visual representation works so as to inform teachers and educational researchers of its potential to serve as a common language to describe learning designs.

INTRODUCTION

In 2000, the Australian Universities Teaching Committee (AUTC) (now referred to as the Carrick Institute for Learning and Teaching in Higher Education) funded a two-year project titled: Information and Communication Technologies and Their Role in Flexible Learning. The aim of the project was to encourage the sharing and uptake of high quality learning designs supported by information and communication technologies (ICT). The project brief was to produce generic/reusable learning design resources to assist teachers in higher education to create high quality, flexible learning experiences for students. The process undertaken to achieve this involved:

- Developing an evaluation instrument to characterize high quality learning designs;
- Identifying high quality learning designs used in higher education;
- Selecting those suitable to be redeveloped in the form of reusable software, templates, and/or generic guidelines;
- Developing these reusable resources; and,
- Making them accessible from a central Web site.

A learning design refers to a description of a learning experience in terms of the activities a teacher devises for students, and how students interact with the teacher and amongst themselves when undertaking the activities. The focus for this project was to identify learning designs that represented “good practice” in the implementation of ICT in terms of providing flexible learning opportunities for students, that is, breaking the hegemony of on-campus face-to-face delivery, and promoting high quality learning experiences. High quality learning experiences were considered in general terms as experiences that encourage students to seek understanding rather than memorizing content and encourage the development of lifelong learning skills.

The need for the project stemmed from the main issue evident in practice and in the literature, namely that the uptake of the use of high quality ICT-based learning designs in higher education has been slow. Attributing factors include: low levels of dissemination of ICT-based learning projects beyond the originating institution (Alexander & McKenzie, 1998), lack of ICT-based learning examples to model (Dijkstra, Collis, & Eseryel, 1999; Tsichritzis, 1999), and barriers to change current practice such as lack of time, support, and training (Collis, 1998). Thus, the significance of the project was that teachers in higher education could benefit from sharing innovative and pedagogically sound ideas, particularly in a climate where there is increasing demand to offer flexible learning opportunities to students (Nicoll, 1998) yet at an institutional level there is pressure to operate at greater efficiency (Cunningham, 1998).

This was a large-scale project that involved an international academic community of approximately 140 people who contributed in various capacities. The project team comprised four team leaders, a four-member research team, an international review panel of 18 and a steering committee of four. There were over 50 designers that submitted ICT-based learning designs for review, and an evaluation team of 60+ that reviewed these learning designs, plus a number of development teams that produced the reusable learning design resources. A project manager orchestrated all project activities. The main artifact produced from the project is the learning designs project Web site (www.learningdesigns.uow.edu.au), which has been heralded as one of the most extensive Web-based teaching resources available in higher education (Hicks, 2004). The site includes five generic learning design guides, four generic learning design software tools and over thirty contextualized learning design exemplars. Also provided are project publications and information about how the project was undertaken.

In a review of AUTC funded projects, Hicks stated that the learning designs project Web site

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