



Teachers, technology and design

Peter Goodyear & Lina Markauskaite
University of Sydney

Shirley Agostinho & Lori Lockyer
University of Wollongong

James Dalziel & Leanne Cameron
Macquarie University

Deciding how best to combine good learning tasks and appropriately supportive technology is becoming increasingly complicated. Teachers in higher education are struggling with rising expectations about graduate capabilities, a diversifying intake, increasing pressure on time and a dizzying proliferation of technology options. One response we are seeing is a strengthening interest in taking a more design-based approach to tackling what many would see as ‘wicked problems’ (Luckin, 2010; Hoadley, 2010; Goodyear & Retalis, 2010). This symposium provides an opportunity to discuss some of the latest insights from research on teachers’ experiences with the tools and methods of educational design (aka ‘design for learning’).

Keywords: learning tasks, educational design, LAMS

Introduction

The symposium will start by drawing on the team’s recent research and development work, to share insights into some important aspects of teachers’ engagement with design. It will merge ideas from research on two ARC projects with some practical experience of design implementation using LAMS. Among other things, it will consider how university teachers engage in design, and what kinds of knowledge and communication are involved in the work of successful design teams. The symposium follows on from a similar very successful event (on the design of complex learning spaces) run at ascilite 2009, which attracted over 60 delegates.

The symposium will begin with a brief overview of the scope and purpose of the event. There will be three 10 minute presentations summarizing key lessons learned from the presenters’ recent work. Each will end with some implications for the improvement of practice (better tools, better support for staff development, etc). We will use LAMS to offer a real-time example of how to design participation structures for events such as this.

Agostinho & Lockyer will focus on Australian university teachers’ *design context and practices*. Goodyear and Markauskaite will focus on the *kinds of knowledge* activated in university teachers’ design work. Dalziel and Cameron will draw on their LAMS experience to help structure further discussion on design issues. Collectively, they will share perspectives on teachers’ design process and discuss how this process can be supported more effectively by the use of appropriate tools and strategies. Subsequent discussion will engage members of the audience in (a) testing the adequacy of these views, and (b) tracing some of their implications for the improvement of higher education practice.

Expected outcomes

This symposium will be especially valuable to those conference delegates whose work involves them in educational design and development projects, and/or the provision of support for teaching staff. It will also be of interest to university teachers and researchers with an interest in design. Expected outcomes include: an appreciation of findings from recent research on teachers' engagement in design, plus implications for staff and educational development and the management of complex, technology-enhanced learning projects.

References

- Goodyear, P. & Retalis, S. (Eds.) (2010) *Technology-enhanced learning: design patterns and pattern languages*, Rotterdam, Sense Publishers.
- Hoadley, C. (2010) Roles, design, and the nature of CSCL. *Computer in Human Behavior*, 26, 551-555.
- Luckin, R. (2010) *Re-designing learning contexts: technology-rich, learner-centred ecologies*, New York, Routledge.

Presenter contact details:

Peter Goodyear, Professor of Education , CoCo Faculty of Education and Social Work
The University of Sydney
peter.goodyear@sydney.edu.au

Lina Markauskaite, Centre for Research on Computer-supported Learning and Cognition (CoCo Research Centre)
lina.markauskaite@sydney.edu.au

Shirley Agostinho, Faculty of Education, University of Wollongong
shirleya@uow.edu.au

Lori Lockyer, Faculty of Education, University of Wollongong
lori_lockyer@uow.edu.au

James Dalziel, Director, Macquarie e-Learning Centre of Excellence
james.dalziel@mq.edu.au

Leanne Cameron, Macquarie e-Learning Centre of Excellence
leanne.cameron@mq.edu.au

Please cite as: Goodyear, P., Markauskaite, L., Agostinho, S., Lockyer, L., Dalziel, J., & Cameron, L. (2010). Teachers, technology and design. In C. H. Steel, M.J. Keppell, P. Gerbic, & S. Housego (Eds.), *Curriculum, technology & transformation for an unknown future. Proceedings ascilite Sydney 2010* (pp.393-394). <http://ascilite.org.au/conferences/sydney10/procs/Goodyear-symposium.pdf>

Copyright © 2010 Peter Goodyear. Lina Markauskaite, Shirley Agostinho, Lori Lockyer, James Dalziel & Leanne Cameron.

The author(s) assign to ascilite and educational non-profit institutions, a non-exclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to ascilite to publish this document on the ascilite Web site and in other formats for the *Proceedings ascilite Sydney 2010*. Any other use is prohibited without the express permission of the author(s).