Chapter 91
Mobile Social Media as a Catalyst for Collaborative Curriculum Redesign

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ABSTRACT

This chapter illustrates the potential of mobile social media to be used as a catalyst for collaborative curriculum redesign. The authors critique a case study implementing a mobile social media framework for creative pedagogies and draw out the implications of this framework for wider educational contexts. They conclude that an effective mobile social media framework for collaborative curriculum redesign must meet three goals: model the building of learning communities, explore the unique affordances of mobile social media to enable new pedagogies, and establish a supporting technology infrastructure.

INTRODUCTION

Balsamo (2011) argues that higher education needs a "reboot" in order to engage with new pedagogies relevant to today's learners and their prospective professions. Such a reboot requires curriculum redesign, and Laurillard et al., (2011) argue that curriculum design should be a collaborative process, and should be regarded as a valid design science (Laurillard, 2012). The challenge of innovation in curriculum design is enabling lecturers to think differently or creatively about pedagogy, content delivery, and assessment, this effectively involves a culture change or ontological shift (Chi & Hausmann, 2003) where the role of the teacher, the learner, and technology are

DOI: 10.4018/978-1-4666-8789-9.ch091

reconceptualised. Hase and Kenyon (2007) note that "people only change in response to a very clear need. This usually involves distress such as confusion, dissonance, and fear or a more positive motive such as intense desire". Thus some form of catalyst is required to bring about pedagogical change. We argue that mobile social media is such a catalyst (Kukulska-Hulme, 2010) that enables a pedagogical refocus from teacher-directed content delivery to student-generated content and student-generated learning contexts. This refocus can be viewed as part of a continuum of pedagogical change enabled by new and emerging technologies, and the emergence of mobile social media in particular. We illustrate this continuum in Table 1.

We call this pedagogical change timeline the post web 2.0 continuum to reflect the technological developments and their pedagogical affordances from the rise of the Internet, web 2.0, and the virtually ubiquitous uptake of mobile devices such as cellphones. This project was also informed by the researcher's six critical success factors for maximising the potential of mobile social media for higher education (Cochrane, 2014):

1. The pedagogical integration of the technology into the course and assessment.
2. Lecturer modelling of the pedagogical use of the tools.
3. Creating a supportive learning community.
4. Appropriate choice of mobile devices and Web 2.0 social software.
5. Technological and pedagogical support.
6. Creating sustained interaction that facilitates the development of ontological shifts, both for the lecturers and the students.

Table 1. Post Web 2.0 continuum

1995	2005	2013
• Web 1.0. • Teacher. • LMS. • Content delivery.	• Web 2.0. • Student. • ePortfolio. • Student-generated content.	• Mobile. • Collaboration. • Connectivism. • Creativity. • Student-generated contexts.

Smartphones and tablets are powerful computing devices with unique affordances that enable student learning in multiple contexts. These mobile devices facilitate rich- media recording of student activity in the form of images, video, audio, and geolocation data. With multiple built-in sensors and ubiquitous connectivity these mobile devices can be used to rethink collaboration and develop the potential for enhanced engagement and learning outcomes. Large-scale mobile learning research projects in the UK (Attewell, Savill-Smith, Douch, & Parker, 2010) and Europe (Unterfrauner & Marschalek, 2010) have demonstrated that mlearning empowers marginalized learners, and Australian research has shown mlearning is a catalyst for enabling authentic learning (Herrington, Herrington, Mantei, Olney, & Ferry, 2009).

However, while mobile learning (mlearning) is an established field of research (Pachler, Bachmair, & Cook, 2010; Parsons, 2013; Sharples, 2009) there are two significant gaps in current knowledge. Firstly it is increasingly clear that 'net-generation' learners do not automatically apply the functionality of their devices to the attainment of deep learning outcomes (Kennedy, et al., 2007; Sheely, 2008; White & Le Cornu, 2011). More knowledge is required about how to achieve the shifts in conceptions of learning that are necessary for effective use of mobile devices. Secondly there is a lack of studies on integration of findings from mlearning research into sustainable change in curriculum, policy and infrastructure (Traxler, 2010, 2011). The project aimed to address these gaps by implementing a framework for enhanced learning and institutional change across different disciplines and institutions. The project aims to generate a range of practical strategies for students, teachers and leaders to utilise the affordances of mobile devices for pedagogical transformation and empowering learners.