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New tablets in old bottles? Do mobile technologies encourage innovative learning and teaching practice? (0148)

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Abstract

This paper reports on a longitudinal study of university lecturer's use of tablet technologies within a British university and considers the use of these technologies in three key areas, namely: as an administrative device, as a research tool and to support innovative learning and teaching practice. The study assessed whether the support of a community of practice (Wenger, 1998) could develop and support innovative learning and teaching practices. The findings are analysed using Zemsky and Massey's (2004) staged adoption of innovations framework and the author reflects upon the relentless introduction of new technologies and considers their potential use in learning and teaching innovation within higher education.

There is an ongoing desire to promote the use of new technology in higher education and there remains a largely unquestioned view that the incorporation of new technology within teaching is a positive addition or replacement for much traditional teaching. Nevertheless as Laurillard (2008) points out, "Education is on the brink of being transformed through learning technologies; however, it has been on the brink for some decades now". The transformational promise of new technologies has yet to be realised.

A focus upon the academic's attitude towards technology use has emerged from the literature. In Zemsky and Massey's (2004) innovation adoption curve it is postulated that innovators and early adopters, behave differently from later adopters in their use of technologies. They are motivated by intrinsic interest in the technology itself and are prepared to devote time and energy to understand it. The early majority are more interested in the use of the technology and what it can do for other areas of their lives rather than the technology itself. Diehards, by comparison, may never voluntarily adopt the new technology.

A longitudinal study of university lecturer's use of tablet technologies commenced in a British university in June 2011. The project aimed to establish whether the use of mobile technologies could positively impact academics' roles as administrators, researchers and teachers. Sixteen tablets (iPads and Xooms) were distributed to a group of academic staff and their experience was monitored through the completion of three questionnaires, distributed within the first year of the study and subsequently followed by a semi-structured interview.

Participants in the study were characterised by their experience and willingness to

use new technology along the Zemsky and Massey innovation adoption curve. All participants were found to gain from the use of a tablet in their research; with the ease of identifying, downloading and reading relevant papers highlighted as key benefits, in addition to the benefit of a single location for 'field notes' and related papers. Most participants also related positive experiences of using a tablet for administrative purposes; with the 'mobility' factor as key and the advantage this provides for accessing and inputting information in any location. All these benefits were identified early in the study and continued throughout the project.

Changes to learning and teaching practice were however less significant. Most participants were able to identify and trial perceived enhancements to their practice. In most cases however, these new innovations did not have a lasting impact upon practice and this was more pronounced in 'late adopters', who tended to perceive the use of mobile technology as a 'bolt-on' and non-integral part of their programmes of study.

'Early adopters' on the other hand identified the synergies between their own behaviour as individuals and their practice as researchers and their 'automatic' modeling of these behaviours with their students. Their comfort with the technology appears to have given them confidence and enthusiasm to relay this process knowledge alongside conceptual knowledge.

All participants viewed the use of a community of practice as a developmental tool positively. However, ontological and epistemological differences were identified as barriers to adoption of others practices and whilst praised as interesting participants found few 'transferable' items that could be incorporated in their own teaching.

References

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