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M-learning as a means of supporting learners: tomorrow's technologies are already here, how can we most effectively use them in the e-learning age?

AUTHORS:

Andy Stone (A.Stone@kingston.ac.uk), Graham Alsop (G.Alsop@kingston.ac.uk), Chris Tompsett (C.P.Tompsett@kingston.ac.uk), Jonathan Briggs (J.Briggs@kingston.ac.uk)

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NAME AND ADDRESS OF CONTACT PERSON:

Andy Stone Learning Technology Research Group Kingston University Penryhn Road Kingston Upon Thames Surrey KT1 2EE

TELEPHONE:

020 8547 2000 ext 2838

EMAIL:

a.stone@kingston.ac.uk

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PROPOSAL:

Background

Mobile telephone ownership and usage is now almost ubiquitous amongst student communities, but until now has been largely passed over as a technology for supporting student learning. Within our campuses (and beyond), there exists a wireless network used by students for social interaction, but almost completely ignored by universities (apart from being perceived as another annoyance and distraction). As we move towards increasingly powerful networks and handsets, the "m-learning" bandwagon gathers increasing momentum - but the potential of what can already be achieved has hardly been explored.

Introduction

This paper begins with a review of the use of SMS and WAP technologies in education (1-7), i.e. institution-led trials of novel applications. This is placed in the context of other technologies used in learning. Research methods are then identified and used to show which learning activities

could be leveraged by using mobile technologies that are already adopted and in use by learners in social contexts.

To explore the optimal combinations of different technologies that maximise participation, usage, and usefulness and establish the scope of the research two approaches are taken: a review of the literature on complementary media, and an analysis of recent research.

This literature suggests that learning happens in a complex environment (8) and that technology ought to be 'Learning Needs Centred' (9). Furthermore, multiple-media is required to match this context of complexity (10). Interestingly it has been claimed that students use 'old strategies' to learn using new technologies (11), and it is suggested that supporting learning with new technologies could offer leverage in learning activities as yet unexplored.

The literature review on mobile technologies (12) includes local work that has established that students are most interested in using technology to better manage their time (13, 14); and secondly, through information in applied research trials that focuses upon which combinations of SMS, email and web forms achieve the highest response rate (15).

The research method adopted to explore optimal combinations of technologies will be grounded in the students' perceptions of which mediums and combinations of media they use, and how these are used in a learning context. The study will encompass 80 students that will be working in teams of 5. This will allow two approaches to be used: one qualitative, the other quantitative.

The quantitative study will identify the combinations of technologies that students use, and determine the contexts of use, including learning. The qualitative study will establish detailed information and the development of a theory grounded upon their current and perceived future use of technologies for learning. In addition, triangulation will be undertaken across the two studies.

The research team seek a critical appraisal of this project. The outcomes of this work will identify how the use of different technologies can be used to maximise the potential of M-Learning.

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