

## Chapter 80

# Fostering Students' 'Use My Own Device' Attitude: Developing All-in-One Mobile Learning Application

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### ABSTRACT

*This paper describes the development of an all-in-one mobile learning platform, to support students' use of their own mobile handheld devices for assessment and feedback. The application incorporates several features that can be found in many other individual applications, into one platform. The features allow students' participation in peer feedback activities; they also enable students to access their feedback, leave comments on their summative feedback, participate in class discussions, take formative assessment in form of quizzes, and create quizzes for their peers. The application is also designed to alleviate tutors' workload issues by providing a group feedback feature with three options. Fostering students' Use My Own Device (UMyOD) attitude using this all-in-one mobile learning application requires tutors' active involvement to make their class more interesting, interactive and engaging, more active than passive, and increase student attention span.*

### INTRODUCTION

In a world now dominated by information and communication technology, it is becoming difficult to exercise any traditional learning activity without building technology into it. The past decade has seen a radical change in the way students access information. Learning is not only happening in a structured environment, it can occur anytime and anywhere. There is a whole new world of exciting

technologies for institutions to use and make their lessons more effective, interactive, participatory, learner-centred, interesting, and differentiated. However, it is left to the teacher to find out which tools or technologies suit their classes best. Mobile learning is finally surfacing in higher education as prominent technology after several years where interest was confined to researchers and relatively small numbers of innovators and early adopters (Kukulska-Hulme, 2012). Moreover, the

DOI: 10.4018/978-1-4666-8789-9.ch080

dynamics of the mobile learning community are being modified by the quasi universal ownership of mobile devices and their perceived potential (Traxler, 2012). It has been suggested that educators try situating learning within the students' world (Tynan & Colbran, 2006), and learn about and adapt to the changes of the environments, when and where it is right to do so (Sharma & Kitchens, 2004). Learning should be tailored to the students, and the virtual learning space that they now used need to be personalised (Gordon, 2010). Some studies (Taylor et al., 2010) have shown that students do not like mobile handheld devices that do not belong to them because they become outdated and do not reflect their taste. Additionally, ownership not only of the learning and product, but also of the devices and their personal nature motivate the students (Jones, 2006). Furthermore, collaboration in mobile learning might seem to stimulate more knowledge generation and more learning tasks by impelling more motivation than other learning environment (Ryu & Parsons, 2012).

Although many institutions have adopted technology enhanced assessment and feedback, student dissatisfaction with their feedback still remains. On-going communication between tutors and students which encourages positive conversation can motivate and encourage the constructive development in student learning. Teaching staff need to be more available and approachable to students (National Union of Students, 2008). Students need dialogue, not a monologist communication (Nicol, 2008, 2010). The lack of dialogue between students and tutors prevents understanding of feedback message (Bloxham & Campbell, 2010; Rae & Cochrane, 2008; Orsmond & Merry, 2011). This lack of communication also disengages students with the feedback provided (Price, Handley, & Millar, 2011). However, even when communication exists, students do not engage with their feedback (Rae & Cochrane, 2008). Although many ways of getting feedback are offered such

as extra discussion sessions, one-to-one meetings and feedback on exams, students do not seem to use them, and are not interested in collecting their assignment even with the provision of extensive written feedback (Nicol, 2008). There is a need to alter students' fixation on marks (Sadler, 2010) and engage them with their feedback (Blair, Curtis, & McGinty, 2012; Price, Handley, & Millar, 2011). Nicol and Macfarlane-Dick (2006) encourage the use of dialogue and a student-centered approach of feedback where students are more actively involved in the process of feedback for their own learning.

In this paper, the various features of *MyFeedBack*, a flexible all-in-one mobile Web 2.0 application, are introduced, that enable several teaching and learning activities for tutors and students. The paper goes through the development and implementation of the application, illustrates the definition and characteristics of *MyFeedBack* features, gives a brief overview of similar web applications and studies, presents the framework used to develop the system, describes the system architecture, presents a brief account of the development process and early trials, and finally, gives a brief conclusion and future work.

## **EXISTING SOFTWARE**

Despite the growing number of mobile learning solutions and apps available today, there are still some limitations in terms of what they offer, their cost and complexity. There are thousands of educational apps available in stores that only work on specific mobile handheld devices. This can be a drawback for educational institutions willing to tap into the affordances of Bring Your Own Device (BYOD).

Moodle and Blackboard are two popular Learning Management Systems widely used in education. Although offering most of *MyFeedBack*'s features in their mobile versions, they are still quite complex. WebPA (<http://webpaproject.lboro>).

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