

Chapter 2.8

Supporting Mobile Access to VLE Resources through MobiGlam

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ABSTRACT

MobiGlam is a generic framework of interoperability with existing virtual learning environments (VLEs) that provides a compact and easy to use implementation of learning activity on Java enabled mobile devices. A case study was conducted at the University of Glamorgan, UK where MobiGlam was seamlessly integrated with the university's VLE to support the delivery of computer courses at the foundation level. Such integration showed an added value to the participants and in many cases, it improved their use of the VLE. This chapter reports on the deployment, the evaluation, and the results of this case study. The results are analysed from two views: the impact on the participants' use of the VLE and the framework's overall usability.

INTRODUCTION

The computer literacy courses for foundation year students at the University of Glamorgan are delivered through the Virtual Learning Environment (VLE) Moodle (Moodle, 2008). Even though Moodle is configured to enable students to

undertake all course work remotely, face to face tutor assistance is available during regular sessions throughout the week. Regardless of the numerous ways available for communication among students and tutors through the VLE, tutors find it difficult to keep the students updated or engaged with the activities being offered through the VLE. Furthermore, many students can be unreachable even through their emails. Providing mobile ac-

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cess to the VLE resources has the potential to address these issues and enhance the use of the VLE. However, there are several challenges associated with introducing such technology, for example, achieving wide acceptance and support from involved staff while considering cost issues and extra staff time. In addition, the threat of poor usability of mobile devices can influence the users' whole experience.

MobiGlam is a framework that is designed in a way that achieves flexibility of use in various learning contexts and for a wide range of mobile devices (Meawad & Stubbs, 2008). MobiGlam can provide seamless mobile support to students and tutors who use the VLE. Their regular use of the VLE will not be affected and supporting mobile access will not require extra effort or preparation for the tutors. For example, when tutors assess course work on the VLE, notifications are automatically generated to the assessed students with their personal information without the tutors being involved in the process. Additionally, students will be able to instantly access this information without further work from the tutor. Such instant access and SMS notifications can be achieved for various resources of the VLE, including, exercises, assignments, messages, grades, quizzes, events, workshops, forums, news and users' information.

A case study was conducted at the University to evaluate the feasibility and the impact of using MobiGlam with foundation year students. This chapter discusses the details, observations and results of the case study. The chapter starts with a background about similar work in higher education; then we give a description of the evaluation context and the deployment process. This is followed by an analysis of the participants' background and pre-use expectations. Then, the results and post-use feedback are reported. The results are analysed in detail from two views: the framework's overall usability and the value of the mobile support for the participants.

MOBILE ACCESS TO LEARNING SERVICES IN HIGHER EDUCATION

In the University context, there are several attempts to support students in managing, organising and enhancing their learning experience through mobile access to a variety of activities. The University of Birmingham introduced a mobile learning organiser that provided a set of integrated tools to students: a Time Manager, a Course Manager, a Communication Manager and a Concept Mapper (Corlett et al., 2004). As indicated by the names of these tools, they provided various activities to help learners organise their schedules, communicate and take notes on their mobile devices. Additionally, desktop based applications were provided to help tutors in creating content for some of these tools, for example, time schedules, events and deadlines. Such content can be downloaded as demanded by students on their devices through the mobile organiser. An evaluation of the mobile learning organiser took place with seventeen students from the University of Birmingham where students were loaned PDAs with the dedicated software (Corlett et al., 2004). Additionally, they were allowed to download any additional applications for their personal use. The results showed that students used the organiser mainly for communication and time management purposes.

The mobile learning organiser was one of the first initiatives to support mobile access in a University context. However, it was only introduced for a specific series of devices which forced the evaluators to introduce these specific devices to the participants. Consequently, they were unwilling to invest time or money in using the device. Students reported the usual usability issues that could result from the limitations of mobile devices, for example, memory size, battery life and portability issues. The lack of the sense of ownership of the mobile device among the participants caused lack of interest in investing time or money in using the device. Additionally, this evaluation has

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