### Chapter 58

# A Case Study of Developing Suitable Mobile Learning Technology for a Distance Learning Masters Programme

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### **ABSTRACT**

In 2012, following some development work, the Department of Criminology launched a new distance-learning course: the MSc Security, Conflict, and International Development (SCID). The target profile for students looking to enroll in this course were living or working in and around conflict regions; they may be forces personnel or professional staff stationed in areas of conflict or recent conflict. Therefore, reliable Internet connection (broadband or cellular) is often rare or intermittent. The course was designed to give learners a rich learning experience in such a way that their learning could remain largely uninterrupted when they experienced loss of Internet connection. Learners in this course were sent an Apple iPad as part of their course fees and given instructions to download a Course App comprising multimedia-rich learning resources. The programme enabled students to study and learn whilst on the move and provided an opportunity for study where otherwise it would have been very difficult, if not impossible for some. The authors believe they have widened participation and enhanced learning capacity through the innovative programme design. This programme is explored in this chapter.

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#### INTRODUCTION

In October 2013 the University of Leicester was honoured to be shortlisted to the eLearning Awards in 2013 for 'best use of mobile learning' (University of Leicester, 2013a). Mobile learning is recognised as being a "relatively new phenomenon and the theoretical basis is currently under development" (Kearney, Schuck, Burden and Aubusson, 2012, n. p.) and that we need to approach the "whole process [of mobile learning] as a platform approach" (Quinn, 2013, p.161) and not just a different delivery mechanism. Despite the current trend toward mobile computing and 'always-on' learning (Wheeler, 2013), persistent Internet connectivity by a learner cannot be guaranteed, regardless of where the learner lives. The lessons learnt from developing and delivering this MSc course may be applied anywhere. Furthermore, while developing a course which may rely heavily on mobile learning, it is important to recognise that the pedagogic perspectives of the learning resources and provision of any required devices have potential to derail the workflow and timetable for development and take the team in an unforeseen direction. This risk can be mitigated by employing sound pedagogic principles in course design, as was done in the MSc Security, Conflict, and International Development.

As will be outlined in this chapter, our group of students for this case study was likely to be without Internet access for large periods of time. Hancock (2010) notes some potential problems when producing distance e-learning courses, such as parts of the developing world not having the infrastructure required for Internet access, and the fact that certain groups of students such as those in the armed forces on active service, prisoners, those in secure hospitals [in her case she was specifically referring to prisoners] simply do not have Internet access at all, or have intermittent access. This should be a consideration when designing courses. There are ways of identifying resources

for student use; Hancock suggests "essential, desirable or optional" (p. 9), (we identified them as "required" and "useful") and efforts should be made to ensure ease of access to "essential" or "required" resources. Hancock rightly points out that "Internet access is taken for granted by many but, when constructing distance e-learning courses, we must not forget those for whom Internet access is spasmodic, limited or prohibited. If we do, we risk excluding large sections of the student body" (Hancock, 2010, p. 10).

There are, of course, cultural, educational and personal reasons that account for preferences in type of delivery. There are also pedagogic suggestions and claims regarding teaching delivery: "effective learning design should", as Wedgwood (2013, p. 96) notes, "always keep the ultimate goal for any learning uppermost and ensure that data can be collected to determine if the learners are gaining the required capability." Quinn (2013) continues this theme by saying that, when considering the provision of mobile learning, "your resources will include capabilities around devices, mobile-specific tools and infrastructure. and designers and developers" (p. 161) and that the skills required to keep up to date with the "still-dynamic field" will need to be kept fresh and fluid. Herrington, Mantei, Herrington, Olney and Ferry (2008) observe that there are few examples in literature, at the time the programme was being devised, where mobile devices may be used as cognitive tools to "solve complex problems and to engage students in authentic and meaningful tasks" (p. 419) beyond that offered by a simple replacement of the paper texts.

This chapter will look at the rationale behind the decisions made when developing the programme, the learning materials, and the iPad App. Investigations into the availability of appropriate technologies played a central role in the direction the programme and method of study took. We will outline the background and context for the provision and production of this new programme

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