

Foreword

Mobile learning is a well-established research area that has an impressive track record of innovation in both technology and pedagogy. One of the first major mobile learning projects, Wireless Coyote, opened up new ideas of collaborative, situated, mobile learning with what was then cutting edge technology of ‘duct tape, velcro, microprocessors and radios’ (Grant, 1993). Similar themes of exploratory, situated learning were developed further in the Ambient Wood project a decade later, embedding technologies including RFID tags into the domain of mobile learning (Rogers et al., 2004), and this type of environmentally focused mobile learning continues to evolve (e.g., Rogers & Connelly, 2010; Spikol et al., 2009). Other concepts that have gained traction in the mobile learning community have included mobile educational games (e.g., Dugstad Wake & Baggetun, 2009; Schwabe & Göth, 2005), technologies for augmented learning in context (e.g., Facer et al., 2004; Ogata, 2008), and contextual interactive learning in museums, galleries and historic places (e.g., Vavoula et al., 2009). We have also seen major European mobile learning projects such as MOBILearn and M-Learning (Kukulaska-Hulme et al., 2009) and the HP Mediascapes platform that enables anyone to rapidly develop geotagged multimedia mobile learning tools (Stenton et al., 2007).

In parallel with these significant and ambitious projects, which have often pushed the boundaries of technology, we have also seen a groundswell of more modest but also more widespread mobile learning initiatives, often leveraging commonly available and cheaper technologies such as SMS messaging (e.g., Petrova, 2010; Scornavacca et al., 2009) and podcasting (e.g., Bell et al., 2007; Wilson et al., 2009). Small mobile applications have also been developed in many areas that can be easily deployed on a wide range of standard mobile devices, for example, Java Midlets for mathematics learning (Weizman, 2005).

The development of mobile learning over the last 20 years, embracing both the present and the future, can be seen as a synergistic range of initiatives that have involved commercial organizations, researchers, and educators in universities and schools, and independent developers, giving us both inspirational projects and practical, everyday tools. This rich heritage raises the question: what are the major issues that need to be addressed in contemporary mobile learning? In that context, the focus of this volume is how mobile learning can deliver information to students, and the concerns of its authors outline some essential themes and questions that the mobile learning community must continually address, such as: how can mobile learning be encouraged? What tools are most appropriate for its delivery? What is best practice in mobile pedagogical design? And how does mobile learning work in practice?

The first of these major themes, which emerges from several chapters in this book, is questioning how learners may be encouraged to use certain types of mobile learning. Some authors have focused on identifying factors that can facilitate or inhibit mobile device use, since it is essential to have an understanding of the learners’ perspective. The importance of student perceptions cannot be underestimated.

Learner behaviour, attitude, and perceived performance have a complex relationship with the learning conditions that we provide. One such issue discussed is that students prefer to get their academic information through “official” channels, such as email and course management systems. There is, potentially, resistance towards receiving information through channels that are perceived to be outside the usual realm of educators, including mobile devices and social networking. However, it does appear that they are willing to accept certain types of information through social channels, as long as they do not have to share personal information.

When we start to look at the tools most appropriate for mobile learning delivery, it is clear that there are many choices, and, as indicated at the beginning of this foreword, technologies will often be chosen for their availability and economy, as well as their utility. One of the chapters in this book uses an extensive literature review to indicate that a range of mobile device types (e.g., Smartphone, iPod, PDA etc.) are in widespread use for mobile learning across the world, emphasizing the value of approaches that are not linked to a single platform. Two commonly applied technologies that work across many mobile applications, which are also economical and reliable, are SMS messaging and podcasting, and some discussion of these approaches is included here. Of course, just because a technology is simple and widespread does not mean that its use alone is helpful. Brabazon (2007) has expressed some reservations about the headlong rush towards online resources, without critical thinking about their application: “Education is not a hobby to be slotted into a lifestyle. Without care in the construction of curriculum, the fun and flexibility of sonic mobility will crush the discipline required for motivated learning” (p. 30). Clearly, it is essential to continue the debate about how such technologies should be employed. One important aspect of this debate covered here is the role of learning objects and learner-generated content in podcasting implementations. This is not to say that these common and basic technologies are the only concern of this volume, as more ambitious approaches, such as augmented reality, are also explored.

From conditions of technology, and the awareness that applying a technology alone does not address learning issues, we move naturally on to considering what are best practices in mobile pedagogical design. A number of the chapters in this book address various issues of design, including the importance of overall course design models, and the application of pedagogical principles to specific learning situations. There is also discussion of the differences between situation based learning and activity based learning (push and pull), the value of both perspectives, and the design of pervasive learning environments than can support both.

Finally, a number of the authors address how mobile learning works in practice, including various case studies, covering topics as disparate as library classification, second language learning, hospitality, and medicine, including speech pathology. The medical context seems to be a useful domain for case studies, due to the prevalence of mobile devices in that profession, the physical mobility of medical staff who often work across multiple sites, and their need for frequent communication. The scope for situated learning is also very strong and a compelling example of where mobile learning can be usefully applied.

In summary, this volume addresses a range of important contemporary issues in mobile learning research, and provides the research community with valuable additional resources in the growing canon of mobile learning literature.

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