Foreword

The recent spate of Horizons reports (e.g. Johnson, Levine, and Smith, 2008 & 2009) provide us with a hint of what is coming at us in education and work-based learning over the next 5 years in terms of new digital technology and media. Specifically, over the next year or two we will see the deployment in educational institutions and the workplace, such innovations as the next generation mobile devices, mobile broadband, cloud computing, collaborative Webs, geo-everything, and context aware learning. Developing converged media architectures that creatively build on what we know about e-learning, but that further explore what is new will require us to make creative use of existing and emerging infrastructures and technologies. Given these trends, this book makes a timely contribution to mobile learning research. The challenge, as the editors make clear, is to overcome important non-functional requirements such as scalability, ubiquity, and interoperability. All of this needs to be done in the context of legacy systems that sometimes do not want to interoperate with each other, let alone interoperate and scale up with the systems we are appearing on the horizon.

Mobile learning is an emerging and rapidly expanding field of research that cuts across schools, colleges, universities, and workplace learning. It is also gaining increasing importance in informal learning (see e.g. Cook, Pachler, and Bradley, 2008). Furthermore, mobile learning is increasingly able to make use of converged functionality such as the GPS feature of devices to enable location-based and context-sensitive learning. Definitions of ‘mobile learning’ tend to revolve around the mobility of the technology or the mobility of the learner; of late there has been a clear change in emphasis to the latter. Indeed, I agree with Sharples, et al., quoted below, that instead of focusing on learners’ interactions with peers and technology there needs to be a greater focus on learning context, practises and the mobility of learning:

There is a need to reconceptualise learning for the mobile age, to recognise the essential role of mobility and communication in the process of learning, and also to indicate the importance of context in establishing meaning. (Sharples, Taylor, and Vavoula 2005, p. 1).

What is crucial is that context is seen as an emergent property of the activities and interactions that take place in a specific context. According to Dourish (2004), the determination of contextuality cannot be made a priori. It is an emergent feature of the interaction, determined in the moment and in the doing. In other words, context and content cannot be separated. Context cannot be a stable, external description of the setting in which activity arises. Instead, it arises from and is sustained by the activity itself (Dourish, 2004). In this sense, learning can be seen as meaning-making, that is, the ‘making sense’ of everyday life in contexts which are under the control of the learner. Thus, learner agency becomes a key
issue in that learners may be using their own mobile phones within social structures that exist outside formal educational institutions.

This book provides a useful addition to current mobile learning research from a software architecture and computer science perspective and is structured into three sections. Section 1 examines architectural types, frameworks, and platforms for mobile learning systems. Section 2 looks at technological advances in support for mobile learning. Application and case studies on mobile learning practices is the focus of Section 3. The notion of context pervades parts one and two in particular but takes many perspectives that range from the ICAT (Identification, Classification, Adaptation, and Tagged XML) framework for mapping between devices and content (Chapter 4) through to contextual widgets, which are components which gather, process, and store contextual data in a distributed, blended learning environment (Chapter 11). Indeed, in Chapter 12 the authors draw on Dourish’s notions of context mentioned above to present a context reasoning ontology which defines the entity concepts (Classes) and the semantic relationship between them. Furthermore, the notion of mobility is usefully dealt with through mobile grids (Chapter 8) and in Chapter 9 through an examination of mobility as freedom of movement across myriad contexts. Section 3 provides case studies taken from practice in a variety of sectors ranging from school to higher education. For example, Chapter 15 looks at a generic framework for interoperability with existing virtual learning environments. In Chapter 17, the authors usefully explore the key notion of learner identity as a way to support learner engagement and participation.

The above overview of this book is meant to give an indication of how the authors of the chapters tackle the issues that I have identified above; specifically those of interoperability, scalability, ubiquity, plus mobility and identity in the process of meaning making across contexts. What is striking about this book is that the editors have drawn on contributors from around the world so that we are provided with a truly international perspective. The scope of the chapters in this book is very broad indeed and I commend it to you for the simple reason that it makes a serious contribution to the issues delineated above.

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REFERENCES


