Chapter 14
The Pedagogy of Mobility

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ABSTRACT

Direct student experience of the real, live organism, object, place or environment is recognised by teachers and other educators as having powerful potential for high quality learning. Rendering this rich experience into explicit learning contexts for students remains an on-going pedagogical challenge. The use of mobile technologies as a way for students to capture their experience as it happens in the real world holds great promise as a vehicle to support authentic learning. This chapter presents a series of cases where different school groups were challenged with different mobile learning activities. The first two cases are derived from research studies in the local environment. In these two cases students were involved in inquiry-based learning where they used data collected in the field with handheld computer and digital cameras to assess the health of their local environment. The second two cases are derived from complementary geography tasks in the field. In one case students worked in pairs to navigate a given route, and in the fourth engaged in a debate about an issue pertaining to urban planning using text- and picture-messaging technologies. The results of the cases are analysed with a view to generating some general principles around the technologies, the activities and the tools that comprise the pedagogies embodied in these cases. It is hoped that they will inform more effective professional practice, specifically when teaching spatially dependent tasks and, more generally, in mobile collaborative learning environments.

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INTRODUCTION

“The fact is that to achieve high quality learning inside the classroom you have to take students outside the classroom.”

(Principal, Environmental Education Centre)

The pedagogy of mobility embraces the idea of thoughtful teaching practice that engages students in meaningful learning in environments beyond the classroom. Experiences gained and captured in the field form part of a sequence of learning activities embedded in a unit of classwork. Effective use of mobile technologies enables a seamless connection between learning environments where both teacher and students can access a wide range of activities and resources as well as their own materials to support learning across time and place. This chapter seeks to explore the complex issue of effective pedagogy relevant to this 21st century learning situation by exploring the practice of teachers and researchers as they scaffold student learning using mobile technologies in local outdoor environments.

The broad aspirations for high quality learning and teaching held by teachers and other education professionals are based on the application of social-constructivist perspectives drawn from the work of researchers and theorists such as Piaget, von Glasersfeld and Vygotsky. This perspective holds that learners, individually and as part of a social group, actively construct their own understandings of the world as a result of their experiences through processes of construction and re-construction of mental frameworks. Clearly, in the context of this perspective, there would be no ‘one size fits all’ teaching approach. Rather, sets of principles or guidelines that describe high quality learning have been developed based on research of effective teaching and learning practice (e.g., Department for Education and Skills, DES, 2004; NSW Department of Education and Training, NSWDET, 2003a).

Common elements of 21st century teaching and learning involve a learner-centred approach (DES, 2004; National Research Council, NRC, 1999) that is based on deep understanding of key concepts (NSWDET, 2003a; NRC, 1999) that are linked to the learner’s real world contexts with access to real sets of data and information (DES, 2004, NSWDET, 2003a; NRC, 1999). Rather than a fixed body of information, knowledge encountered by students is seen as problematic and may be viewed from a range of perspectives. Students are encouraged to actively engage with their learning, being aware of teacher expectations and any assessment criteria that may be applied to learning activities. The role of the teacher becomes less of an authoritative source of information and disciplinarian to more of a facilitator of learning – a coach or a guide for students. Students clarify and build their understandings by engaging in sustained conversations around the ideas and concepts that they encounter in their learning activities (Laurillard, 2007; NSWDET, 2003a).

This chapter considers the nature and role of fieldwork within this context and discusses research of teaching practice or pedagogy associated with fieldwork with a view to locating practice within a 21st century learning context. Four case studies are used to demonstrate the use of mobile technologies to support student learning and the pedagogical principles associated with these cases are discussed.

Fieldwork and Mobility

Rickinson and his colleagues (2004) in their comprehensive review of research relevant to outdoor learning concluded that “well planned, competently delivered and effectively followed-up fieldwork can result in learning that supplements and enhances students’ experiences in the classroom” (Rickinson et al., 2004, p. 52). The review acknowledged the increasing number and range of research studies conducted over the past two decades including accounts of work
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