Mobile learning: Two case studies of supporting inquiry learning in informal and semiformal settings

A.C. Jones*, E. Scanlon, G. Clough
Open University, UK

Mobile technologies can support learning across different contexts as their portability and personal nature enables them to be used by the learner in whichever context she or he is in. Informal contexts can be particularly beneficial, because the learner has more control over their learning goals and motivation (usually intrinsic) is often high in informal and semiformal contexts (Falk & Dierking, 2000; Jones et. al., 2006, National Research Council, 2009). One motivating aspect of informal learning is that inquiries are likely to be personally relevant in terms of topics of interest and capitalising on learners’ location as learners decide what, where, when and whether to learn.

There is considerable interest in how such benefits can be harnessed for more formal learning but one challenge is how to make inquiries personally relevant in such contexts. We will examine two case studies of inquiry learning in contrasting settings. Case study one is of informal adult learners using their own mobile technologies to learn about landscape, whilst case study two reports on using Web based software to support science inquiry learning by 14-15 year olds in a semiformal context.

Case study 1

This is drawn from an investigation into informal learning in the Geocaching community (Clough, 2009), in particular learning from Earthcaches, created in order to teach about the landscape. Geocaching is like a treasure hunt where Geocaches are hidden and their GPS co-ordinates are provided on the website to lead Geocachers to the general cache location in order to hunt for the cache. Information about caches are provided on the web-site, and after finding the cache Geocachers post photos and accounts of their experiences on the site, taking care not to reveal the exact location. The Geocaching website and associated web forums are a repository for Geocaching community resources and provide a record of members’ interactions. Over time, a digital record is built up of various locations as Geocachers share their experiences of location through the website, thereby supporting a learning community.

Case study 2

This is drawn from 14-15 year old students’ personal inquiries into sustainability in a Geography after school club, part of the Personal Inquiry (PI) project. It is one of many personal inquiry trials, conducted during the EPSRC/ESRC funded PI project in different settings including the classroom, fieldtrips, a gymnasium and a nature reserve (Scanlon et. al. 2010). In most of these inquiries the content was driven by the school curriculum which has implications for the extent of personalization possible. In the Geography after school club however, which ran over 10 weeks, children could develop their own inquiries, in conjunction with their teachers and the project researchers.

This less formal setting provided two important opportunities: firstly to try out types of inquiry that could not be supported within the formal curriculum, and secondly for the choice of inquiry to be decided by the students. The students’ main inquiries focused on food decomposition experiments and were supported by the Personal Inquiry toolkit, nQuire (www.nQuire.org.uk). They worked in groups and monitored the rate of decay of different foodstuffs, taking readings (e.g. temperature, humidity) and collecting and recording observational data, and presented their inquiries to the other students in the club.

In our talk we will compare and contrast the case studies in terms of the dimensions of learner control, location of learning, and the different support mechanisms for inquiry learning.

References


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