



iPad2 as a personal learning environment (PLE) for field scientists

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The concept of a personal learning environment (PLE) is not new (Van Harmelen 2006) although have generally been thought of as personalised Virtual Learning Environments (VLEs) and are institutionally located. Personal Learning Environments (PLEs) are essentially personalised information systems tailored for any one of a variety of requirements in a 'Learning Space' (Savin Barden 2007). Such systems, especially if mobile and portable, help learners take control of and manage their own learning (e.g. Koole, 2009). A PLE allows the integration of a number of "Web 2.0" technologies like blogs, Wikis, RSS feeds, Twitter, Facebook, etc. around the independent learner, but could be as simple as a pen and notebook. A PLE has been deemed a "transportable 'knowledge kit' that can be added to, adapted and developed by an individual". Such flexible and portable devices, with good battery life sufficient for a day in the field as well as easy to read screens and data entry, make an ideal 'field notebook plus'.

The Apple iPad2 has opened doors for bringing technology both into and out of the classroom in geoscience subjects, particularly for fieldwork. The nature of the app-driven technology allows users to adapt and customise the technology to their needs and essentially acts as a PLE. In terms of geoscience teaching, 3G capabilities on iPads enable the user to access internet technologies whilst in the field which gives fieldworkers access to a huge suite of apps to use.

Rather than 'technology for technology's sake', the iPad2 can help to solve a number of technical as well as pedagogic problems which occur in the field such as lack of connectivity and importantly maximizing the time spent in the field (perhaps as a result of decreasing departmental budgets). Technological advances can help to reduce time on less important jobs such as data collation which allow students to focus on higher-level skills such as data analysis and problem solving (Bradbeer, 1996).

Over time, the iPad as a PLE may supersede the current virtual learning environments (VLEs) currently in place, not least because they can be used individually, or in a group but especially in field environments. Here we will present two short case studies as examples of using iPad2 to aid the student learning experience during fieldwork. We will also present a range of apps which have been evaluated for fieldwork purposes.

References

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