

JISC

Innovative Practice with e-Learning



Case Studies

Personalised learning

Supporting personalised learning – the Interactive Logbook
University of Birmingham

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Supporting personalised learning – the Interactive Logbook

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Background

The Interactive Logbook was developed as a research project within the Centre for Educational Technology and Distance Learning (CETADL) at the University of Birmingham. JISC has awarded funding for its further development; the Interactive Logbook is now available for UK-wide trials in higher and further education institutions.

The challenge

In order to work in small groups on collaborative projects, access to online learning resources and lecture notes is needed. Students also need to be able to create, share and amend documents in real time, keeping a record of activities and achievements for personal development planning and portfolio-building purposes. Field studies have shown that existing personal information management tools offer only some of the functionality required for educational use at a higher level, and do not always integrate well with Virtual Learning Environments (VLEs), portals or other online systems, or different makes of software.

Innovative solutions

The aim was to design a flexible suite of software applications optimised for use on tablet PCs which, in conjunction with a secure wireless local area network (WLAN), could support student learning in a variety of settings – lecture theatres, libraries, common rooms and individual workspaces. Currently available plug-ins include:

- Log-writing tool for personal development planning
- Email
- Microsoft® Office
- OpenOffice

- SharePoint® Portal client
- Multimedia notebook
- Organiser
- Chat
- File manager
- Web browser

This combination allows a user to create and manage files, view appointments, use synchronous or asynchronous communication tools, store personal notes and documents, and access learning resources via a wireless connection to the network whenever needed. The open architecture allows additional software to be added as required.

Installed on a tablet PC, the Logbook will support learning tasks involving discovery, problem-solving, collaboration and the sharing of resources. Taking a personal device wherever you learn encourages a sense of ownership of learning and increases control over the learning process, building evidence for personal development planning.

The technology

The Logbook has been developed for the Toshiba Tablet PC which runs Windows® XP. As portable as a laptop, a tablet weighs a little over 1.4 kg, has a battery life of 4–5 hours and offers ease of use in different contexts, i.e. standing as well as sitting. The Logbook software can be run in any Windows environment, including desktop computers.

The Logbook's applications are located within four main sections on the screen's launch panel:

- 'Programs' – providing access to the internet and applications such as text messaging, freehand notes, PowerPoint®

The Logbook may have wider applications still to be discovered. The ability to add plug-ins for additional software could enable the tool to provide support for students with disabilities.

- 'Modules' – providing access to teaching materials.
- 'Meeting' – providing access to collaborative tools such as a peer-to-peer whiteboard session.
- 'Diary' – providing time management facilities.

The tab panel at the bottom of the screen gives access to shared group and personal resources.

Key elements of the software (such as diary management) will also be made available in the future on smaller mobile devices such as Java-enabled mobile phones, and integrated with the Logbook software.

Making it happen

Induction for students and practitioners will be needed to develop appropriate uses of the Logbook. Practitioners may also need to be prepared for increased demand in online learning resources. Costs of implementation may be reduced as the number of students using their own mobile devices increases. However, loan schemes will be needed for the foreseeable future.

Key points for successful innovation

- Institutions need to evaluate on a regular basis the ways in which curriculum requirements will impact on students' demand for and use of technologies.
- Physical spaces may need to be altered to accommodate mobile learning: informal group working spaces with WLAN access, data sockets and battery charging facilities must be made available, some of these within existing learning resource areas and libraries.

Final word

Installed on a tablet PC, the Logbook software will support learning tasks involving discovery, problem-solving and collaborative learning. Use of the Logbook by students in lectures and seminars could also speed up their understanding of concepts and prepare the way for assessed group work.

For further research

Interactive Logbook Project – www.il.bham.ac.uk

'Interactive Logbook: Final Report' (1.5 MB, PDF) – <http://portal.cetadl.bham.ac.uk/ilogbook/Public/InteractiveLogbookFinalReport.pdf>

'Interactive Logbook: The Development of an Application to Enhance and Facilitate Collaborative Working within Groups in Higher Education' (paper presented at MLEARN 2004) – <http://portal.cetadl.bham.ac.uk/ilogbook/Public/InteractiveLogbookResearchPaper25thJune.pdf>

The Centre for Educational Technology and Distance Learning (CETADL) – www.cetadl.bham.ac.uk

