



Case Studies

Trials and Tribulations: three key elements in running a successful mobile learning trial in a health care setting

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The Centre for Excellence in Professional Placement Learning (CEPPL) was awarded additional capital funding in 2006 by the Higher Education Funding Council for England (HEFCE) to support the purchase of equipment to develop a mobile learning (m-learning) project. The project's aim is to enhance the placement learning experience of students undertaking health and social care programmes at the University of Plymouth. These students typically spend up to 50 per cent of their time on placement in a variety of settings, often in remote locations. Subsequently, students are frequently located away from their peers and tutors, and the learning resources available on university campuses. Knowledge of, and access to, an up-to-date evidence base is an essential component of practice placement learning (e.g. Nursing & Midwifery Council, 2002) and ultimately service user care. Therefore, methods of delivery that enable connectivity and information access across multiple contexts could allow students to be

supported more effectively whilst on placement.

The utility of three of the purchased devices (mobile telephones, video iPods, camcorders) was tested in trials with second and third year podiatry students. A team comprising learning technologists, academics and pedagogic research staff supported and evaluated the trials. From this experience the team have identified a set of key elements for teams wishing to develop such trials, as follows.

Understanding multiple contexts

Understanding departmental and university culture and context has been seen as essential to the embedding of m-learning initiatives (Traxler, 2005). In the case of placement learning, further account needs to be taken of the ethical and safety issues impacting on learning within health care environments, and the cultural issues concomitant with these. Prior to students being able

to use devices on placement, it was necessary to gain the confidence of practice staff within National Health Service Trusts regarding the aims of the trials and to assure all parties of procedures relating to patient confidentiality, storage of data and infection control. Initially, recording devices such as camcorders were not permitted to be used with patients. Academic staff within the m-learning team, therefore, invited Trust staff to the training session for the trial in order to see for themselves the potential benefits to students and how the devices would be used in clinics. Students were instructed to treat devices in the same way as a set of patient notes in terms of where they could be placed in clinics to avoid contamination of sterile areas. Thus a combination of communication and understanding of placement area needs within the multiple contexts of higher education and the health care sector facilitated the acceptance of this trial on Trust property.

Actively engaging students

Students were provided with hands-on training at the start of each trial, and follow-up support if required. It was initially assumed that this would be sufficient in enabling students to use the devices, and encourage them to use this new method of learning. However, it soon became clear that even students with positive attitudes to using the devices were not using them to learn *per se*. It was therefore necessary for staff on the team to actively encourage students within the

clinic and to make explicit how the devices could be used to enhance their learning (e.g. evidencing learning outcomes; reflecting on practice). Therefore, a key aspect of the success of the trials that have been piloted was the engagement of practice and academic staff in facilitating the trials.

Content rather than technology driven

In order to focus the trials on the enhancement of student learning it was vital that materials were created to supplement delivery of core content to students, rather than be driven by the technology itself. All the trials used off-the-shelf technology that students may own themselves. Therefore, development work was centred around student need by formatting the content required and exploiting the utility of the hardware to support this content.

Conclusion

Our experience so far has emphasised the value of working within an inter-professional team committed to enhancing placement learning. We believe that embedding technology into an existing curriculum requires a holistic understanding within the team of the technology, material development, curriculum design and student need, all of which needs to be subject to rigorous evaluation in order to develop and enhance the student learning experience.

References

- NURSING & MIDWIFERY COUNCIL (2002)
*Requirements for Pre-Registration
Nursing Programmes*, London:
Nursing and Midwifery Council.
- TRAXLER, J. (2005) Institutional issues:
embedding and supporting, in
Kukulska-Hulme, A. & Traxler,
J. (eds) *Mobile Learning: a
handbook for educators and
trainers*, London: Routledge.

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