

MOBILE TECHNOLOGIES IN HIGHER EDUCATION

Learners have always browsed information to gain new knowledge. However, in the digital age information is abundant, and can even be overwhelming. Learners need to develop strategies and skills to find and filter the information they need. Technology provides many new opportunities to support learners to develop those strategies and skills.

Smart mobile technologies, such as tablet computers and smartphones, offer advanced computing abilities as well as access to internet-based resources without the constraints of time or place. The functionality of these devices is continuously enhanced through the inclusion of features from established technologies such as personal digital assistants (PDA), portable media players, GPS navigation, digital cameras and eBook readers [1, c. 35].

Many technological innovations hold real promise to improve learning. But new technologies cannot, in themselves, improve learning. The context within which they are used is crucial to their success or otherwise.

The value of using mobile technologies to support teaching and learning lies in integrating mobile technologies with the current e-learning environments. Any mobile technology application should be appropriate for its purpose. In particular, where it is to be used to support teaching and learning activities, then it should not only be easy to use, readily available and accessible, but the application should adhere to educational principles.

Digital technologies offer new ways of presenting information and ideas in a dynamic and interactive way. It can support two kinds of interaction between learner and teacher. The first is the dialogue between learners and teachers. This is referred to as *tutorial*. the most effective way to learn. Technology can support dialogue between learner and teacher, particularly when they are not in the same location; or when they are unable to communicate with each other at the same time. Technology can enhance dialogue with visual aids, such an interactive whiteboard. Technology can even simulate the role of teacher, as seen in intelligent teaching systems.

The other form of interaction concerns the structuring and presentation of learning material. This can be described as *exposition*. There are a range of digital resources that structure and package learning material from podcasts to e-books to videos on youTube. These resources are accessible and can be engaging; however the learner's role can often be passive. They may need the support of teachers to interpret those ideas and to convert that information into knowledge.

Learning through *tutorial* and *exposition* represent traditional approaches to teaching and remain at the heart of much classroom practice.

Clearly, online technology offers the potential to expand the dialogue between teachers and learners. however, a critical eye needs to be cast over the quality of online materials and any costs associated with accessing those materials, either direct (subscription) or indirect (advertising, data). The development of good quality material requires collaboration between developers, domain experts, teachers, and learners. Finally, as with all online content, it is important to consider whether learners have

access to devices, and whether those devices have an adequate connection speed.

Despite the fact that these online environments have much to offer, it is still necessary to rely on students knowing that the information is available and how to access it online. Technologies that support dialogue between teachers and learners will play an important role in ensuring that online resources are used efficiently and effectively. This can be as simple as using Twitter to engage in live discussion and feedback in the classroom, or through more complex combinations of audio, chat and drawing applications that make personal tutorial significantly more accessible (and affordable) than ever before.

Technology has transformed how students interact with each other and their lecturers. Students can now communicate face to face, over the phone, and via email, SMS and online discussion areas.

Mobile technologies cannot be ignored as part of the e-learning mix and their importance will only grow over time. They are a large part of the future of information and communication technologies in work and social life, and increasing numbers of students entering the university system own and use mobile technologies, particularly mobile phones. These students have grown up with computers, and technology has continued to evolve and enhance their lives.

It seems that the world of e-learning in higher education is in flux and transformation. New e-learning technologies are emerging, including the use of mobile devices in support of the educational process. The constant challenge is to integrate the possibilities of the emergent with ongoing commitments to the established corporate technologies.

However, this can only be achieved by understanding and accepting the limitations of mobile technologies and making sensible decisions about how to use them to promote communication, collaboration and learning.

The proliferation of mobile devices has proceeded throughout society at such a rate that higher education can no longer avoid exploring the educational potential of these tools. As noted by Collis and Moonen: 'You can't *not* do it. The idea whose time has come is irresistible' [2, c. 219].

REFERENCES

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