Chapter 95
Benefits and Challenges of Mobile Learning in Education

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ABSTRACT

Advances in technologies have changed the process of learning, not just in formal educational settings but continuing education as well. Mobile learning is a part of a new learning landscape and offers the opportunity for a spontaneous, personal, informal, and situated learning. With the use of mobile technology in education, online learning communities can incorporate students from different backgrounds with vastly diverse learning styles into an educational setting. This chapter analyses the opportunities mobile learning presents and the impact mobile devices have had on teaching and learning practices and the barriers and challenges to support competitive educational experiences.

INTRODUCTION

In our "information society" education is taking advantage of computer technology which can enhance and improve the teaching and learning process. The traditional classroom, teacher, textbooks, blackboard can no longer satisfy the needs of generations of students used to handling technological tools from a very young age. Mobile phone – the recent and innovative technological device which represents a revolution in education gives the opportunity to learn "in motion", making the learning process more appealing, interesting and motivating. No generation is more at ease with online, collaborative technologies than today's young people – "digital natives", who have grown up in an immersive computing environment. Where a notebook and pen may have formed the toolkit of prior generations, today's students come to class armed with smart phones, laptops and iPods.

Research outcomes reported in Attewell's (2005) summary of the 2001 Mlearn project, suggest that the use of mobile learning may have positive contributions to make in the following areas:

1. Mobile learning help learners to improve their literacy and numeracy skills and to recognise their existing abilities.

2. Mobile learning can be used to encourage both independent and collaborative learning experiences.
3. Mobile learning helps learners to identify areas where they need assistance and support.
4. Mobile learning helps to combat resistance to the use of ICT and can help bridge the gap between mobile phone literacy and ICT literacy.
5. Mobile learning helps to remove some of the formality from the learning experience and engages reluctant learners.
6. Mobile learning helps learners to remain focused for longer periods.
7. Mobile learning helps to raise self-esteem.
8. Mobile learning helps to raise self-confidence (Attewell, 2005, p. 13).

Tutors who have used M-Learning programs and techniques have the following value statements in favour of M-learning.

- It is important to bring new technology into the classroom.
- Devices used are more lightweight than books and PCs.
- Mobile learning can be used to diversify the types of learning activities students partake in (or a blended learning approach).
- Mobile learning supports the learning process rather than being integral to it.
- Mobile learning can be a useful add-on tool for students with specific needs. However, for SMS and MMS this might be dependent on the students' specific disabilities or difficulties involved.
- Mobile Learning can be used as a 'hook' to re-engage disaffected youth.

M-learning can enhance learning by putting students in a real context and create new learning environments. Students may maximize their acquisition of skills, competencies and optimize their time of studying. Students simply go out of their classroom, offices, they are not compelled to stay in a place with a personal computer/laptop. They learn really and immediately, everywhere, in anytime, while they are walking, travelling, doing their routine actions, and above all in "in motion". Mobile technologies are the next step in the evolution of technology-mediated teaching and learning. It not only connects people in information –driven societies effectively, it offers the opportunity for a spontaneous, personal, informal and situated learning. Mobile technologies have sparked the need for the strategies, applications, and resources necessary to support anywhere-anytime connections to formal and situational learning, as well as personal interest explorations(Wagner, 2005). On the other hand, is mobile learning viewed as a technological consideration in delivery systems? Or does it represent a new pedagogy in education? Thomas (2005, p.9) posed the question: "How can this m-learning environment change teaching and learning?"

Thomas further suggested that the wireless connections provide attractive learning environments in a number of ways:

1. **Ubiquity:** Faculty and students have access to course information 24 hours a day, 365 days a year, wherever they are on campus.
2. **Project Sophistication:** Students projects created with laptops tend to be more sophisticated.
3. **Compatibility:** Students have access to the same hardware and software as faculty.
4. **Emphasis on Learning and Teaching:** Overcoming equipment problems allows greater time and resources to be devoted to pedagogy.
5. **Savings:** Replacing desktop computers with laptops, and replacing hard – wired networks with wireless ones translates into cost savings.
6. **Standardization:** A standard platform maximises access and minimises need for technical support (Thomas, 2005, p. 9).

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