

# Chapter 64

## Exploring the Role of Mobile Learning in Global Education

**Kijpokin Kasemsap**

*Suan Sunandha Rajabhat University, Thailand*

### ABSTRACT

*This chapter describes the current trends of mobile devices in education, the applications of mobile technologies in learning, the overview of Mobile Learning (m-learning), and the importance of m-learning in global education. M-learning encourages both blended learning and collaborative learning, thus allowing the learners at different locations to get in touch with their peers or others teams to discuss and learn. The m-learning environment is about access to content, peers, experts, portfolio artifacts, credible sources, and previous thinking on relevant topics. Given the convenience of m-learning, there is less time spent getting trained, and the overall costs are lowered as a results. With m-learning, learners are able to learn in their own style at their own pace. M-learning provides easy access to the learning at any place and any time, which is more convenient to the learners.*

### INTRODUCTION

Mobile learning (m-learning) technologies present an educational innovation toward supporting the real-time learning scenarios through various mobile devices (Boticki, Baksa, Seow, & Looi, 2015). M-learning occurs if learners utilize mobile devices to obtain the learning materials and to support their learning activities at any place and any time (Reychav & Wu, 2015). M-learning can augment formal education and bridge the gap between formal and informal education by creating the extended learning communities using any digital technology in the modern learning environments (Nguyen, Wahman, Pissinou, Iyengar, & Makki, 2015). As mobile technologies emerge, teachers have to keep up with the technological changes so that they can take advantage of the power of modern technology to design and deliver the learning materials (Ally, Grimus, & Ebner, 2014).

In an era of digitally connected students, there is a demand for academic material to be delivered through electronic mobile devices and not just through traditional methods, such as lectures and tutorials (Stewart & Choudhury, 2015). Mobile technologies can be used to enhance the learners' learning moti-

DOI: 10.4018/978-1-7998-8047-9.ch064

vation (Ciampa, 2014). The integration of mobile devices in the educational system presents enormous opportunities stretching from the improved efficiency to the accessibility of education to communities living in remote areas (Khan, Al-Shihi, Al-khanjari, & Sarrah, 2015). Mobile phones are the most accessible tool for both teachers and students (Kafyulilo, 2014).

This chapter focuses on the literature review through a thorough literature consolidation of m-learning. The extensive literature of m-learning provides a contribution to practitioners and researchers by indicating the advanced issues and applications of m-learning in order to maximize the impact of m-learning in educational settings.

## **BACKGROUND**

Technologies have become synonymous with living and learning. Grant et al. (2015) indicated that mobile devices become ubiquitous in society, particularly with the current generations of student. With rapid advances in technology, mobile devices have become widely available and progressively affordable (Hung & Zhang, 2012). Kim et al. (2011) indicated that mobile devices are highly portable, easily distributable, substantially affordable, and have the potential to be pedagogically complementary resources in education. The capabilities of small mobile devices (e.g., mobile phones and tablets) have advanced, with an explosion in the number and types of devices that can access the World Wide Web, toward promoting m-learning (Nedungadi & Raman, 2012).

Mobile technology is increasingly widespread and offers the immense opportunities for learning (Terras & Ramsay, 2012). The integration of mobile technology into the online learning environments plays an important role in enhancing m-learning effectiveness (Huang, Jang, Machtmes, & Deggs, 2012). M-learning, with its features of pervasiveness and flexibility, enables users to learn in any appropriate place and at any appropriate time (Chang, Liang, Yan, & Tseng, 2013). M-learning is recognized as the natural evolution of electronic learning (e-learning) (Martin, Pastore, & Snider, 2012).

## **IMPORTANT ASPECTS OF MOBILE LEARNING IN GLOBAL EDUCATION**

This section emphasizes the current trends of mobile devices in education, the applications of mobile technologies in learning, the overview of m-learning, and the importance of m-learning in global education.

### **Current Trends of Mobile Devices in Education**

There is an increasing interest in the utilization of mobile devices in educational settings (Merchant, 2012). Mobile devices are the resource-limited systems that provide a large number of services and features (Oneto, Ghio, Ridella, & Anguita, 2015). Mobile devices are becoming more pervasive in the modern world for both personal utilization and educational purposes (Ducate & Lomicka, 2013). Mobile devices provide an educational connection to the digital world (Franklin & Peng, 2008). With the heterogeneous proliferation of mobile devices, the delivery of learning materials on such devices becomes subject to more and more requirements (Su, Tseng, Lin, & Chen, 2011).

Mobile devices become embedded in formal educational environments (Levene & Seabury, 2015). The interactive m-learning system built with the wireless personal digital assistant (PDA) devices can

11 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/exploring-the-role-of-mobile-learning-in-global-education/271207](http://www.igi-global.com/chapter/exploring-the-role-of-mobile-learning-in-global-education/271207)

## Related Content

---

### Taking Responsibility for the Future: A Case Study of a State-Run Program to Train K–12 Online Teach

Jayme Nixon Linton and Wayne Journell (2021). *Research Anthology on Developing Effective Online Learning Courses* (pp. 1162-1183).

[www.irma-international.org/chapter/taking-responsibility-for-the-future/271200](http://www.irma-international.org/chapter/taking-responsibility-for-the-future/271200)

### Reshaping the Structure of Learning Objects in the Light of Metacognition

Salvatore Valenti, Carla Falsetti, Sulmana Ramazzotti and Tommaso Leo (2008). *Web-Based Education and Pedagogical Technologies: Solutions for Learning Applications* (pp. 226-246).

[www.irma-international.org/chapter/reshaping-structure-learning-objects-light/31285](http://www.irma-international.org/chapter/reshaping-structure-learning-objects-light/31285)

### Behaviour Analysis for Web-Mediated Active Learning

Claus Pahl (2006). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 45-55).

[www.irma-international.org/article/behaviour-analysis-web-mediated-active/2969](http://www.irma-international.org/article/behaviour-analysis-web-mediated-active/2969)

### Feature Extraction of Dialogue Text Based on Big Data and Machine Learning

Xuelin Liu, Hua Zhang and Yue Cheng (2024). *International Journal of Web-Based Learning and Teaching Technologies* (pp. 1-15).

[www.irma-international.org/article/feature-extraction-of-dialogue-text-based-on-big-data-and-machine-learning/337602](http://www.irma-international.org/article/feature-extraction-of-dialogue-text-based-on-big-data-and-machine-learning/337602)

### Putting Multiliteracies into Practice in Teacher Education: Tools for Teaching and Learning in a Flat World

D. Bruce Taylor and Lindsay Sheronick Yearta (2013). *Teacher Education Programs and Online Learning Tools: Innovations in Teacher Preparation* (pp. 244-263).

[www.irma-international.org/chapter/putting-multiliteracies-into-practice-teacher/67980](http://www.irma-international.org/chapter/putting-multiliteracies-into-practice-teacher/67980)