Chapter 6

Mobile Learning in China

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ABSTRACT

Mobile learning (m-learning in short) has received increasing attention in the new millennium. Considerable interest in exploiting the unique capability of mobile technologies for teaching and learning arises from educators and technical developers in recent years. In this chapter, we present an overview of the development of m-learning in China, including the construction of m-learning infrastructure, and the research projects conducted by universities and companies. Also, suggestions for future development of m-learning are provided.

INTRODUCTION

M-learning is nowadays a common term, not a buzzword. There is considerable interest from educators and technical developers in exploiting the unique capabilities of mobile technologies for teaching and learning. The future is becoming more wireless-oriented.

A nation looking for a lasting economic success must raise the literacy level of its citizens. The importance and centrality of education as a fundamental human right have been well documented in the literature. Ezeomah (1982) and Aleyidieno (1985) state that making education as a fundamental human right provides a viable springboard for transforming social and economic policies. Moreover, providing an equal educational opportunity of for all is an important indicator of social justice. However, achieving an equal right to be educated for all is a challenge, especially in China, as she is less developed, has a large population, and has huge economic and cultural gaps between different regions.

The China’s Ministry of Industry and Information Technology (MIIT, 2008) reports that the number of mobile phone users is 688,340,000 in November 2008 in China. It is about 47.3% of the country’s population. Moreover, the number

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is increasing at a rate of 1.01% per month and 17.51% per year, and the number will be up to 738,000,000 in 2010. The mobile users sent more than 56.87 billion short messages (SMS), 3.01 per day per person in November 2008.

In addition, the China Internet Network Information Center (CNNIC) reports that, there are 155,000,000 mobile phone users who use wireless technologies to access the Internet in 2009 in China. Of all these users, 38.8% are between 10-19 years old, 37.6% between 20-29 years old, 15.5% between 30-39 years old, 5.4% between 40-49 years old, 1.4% between 50-59 years old, 0.8% under 10 years old, and 0.5% above 60 years old. The majority of these users are senior school graduates (43.3%) whose ages range from 12 to 14 and junior school graduates (28.5%) whose ages vary between 15 and 17. 6.1% are primary school graduates, 11.3% are senior secondary school graduates and 10.2% are bachelor’s (CNNIC, 2009). The statistics results show that educating Chinese population via m-learning has great potential in China, as m-learning may help to provide a more equal access and brighter opportunities for all people regardless of races, colors, ages and living places.

The aim of this chapter is to present an overview of the use of different mobile technologies and applications in China, including the construction of m-learning infrastructure, and research projects conducted by universities and companies. Issues and suggestions for future development of m-learning are also provided. This chapter will help readers to better understand the development of m-learning in China.

LITERATURE REVIEW: THE DEFINITION OF M-LEARNING

M-learning is defined rather ambiguously even though it has been popularly used in literature (Traxler, 2007). Different researchers have given various definitions from different perspectives. The following summarizes the definitions in the literature.

Define M-Learning Based on the Mobile Devices

M-learning is often defined as learning conducted via the use of mobile devices. In general, mobile devices refer to any electronic devices which are small enough to accompany us in every moment of our daily life (Caudill, 2007). The broad categories of mobile devices include PDAs, iPods, Plamtop Computers, mobile phones, and MP3 players. The majority of authors view m-learning as learning connected to a mobile device (Aderinoye, Ojokheta, & Olojede, 2007; Ally, 2004; Cui, et al., 2001; Keegan, 2002; QIA, 2008; Sharma & Kitchens, 2004; Trifonova, Georgieva, & Ronchetti, 2006; Wexler, et al, 2007). This definition focuses on the facet of technology in m-learning (Traxler, 2007).

Define M-Learning in the Context of Learning Experiences and Learning Environments

Learners do not learn in a vacuum. They learn while competing and collaborating, they learn by doing and by correcting misconceptions they have from previous learning activities (Laouris & Eteokleous, 2005). Some researchers define m-learning from this prospective. For instance, Sharples (2005) defines m-learning as a learning process, in which learners collaborate with their peers and teachers, construct the meaning of knowledge. Colazzo, Molinari, Ronchetti & Trifonova (2003) state that a m-learning process can be viewed as any learning and teaching activity which is facilitated by mobile technologies or in settings where mobile tools are available. Liu, Li & Liu (2007) and Yu (2007) define m-learning as a novel educational approach delivered, enhanced and supported by wireless and mobile devices and technologies. It enables students to obtain