

# Chapter 1

## Learners and Mobile: A Reflexivity

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### ABSTRACT

*Studies about mobile phones, the learning process, and educational institutions have grown in recent years though research has mostly focused in the United States and in specific groups. This research contributes to the literature by looking at three educational levels in Singapore and by taking a two-pronged approach to the relationship among these three variables. It answers the following reflexivity: How do students learn to use mobile phone functions? How do they use mobile phones for learning functions? This chapter considers learning as the reflexive process where attitude and aptitude are acquired and shared for curricular and extra-curricular activities. Findings indicate two themes: how students 1) develop the skills to use the expanding array of mobile phone technologies, and integrate these in their daily life and 2) use mobile phones in school and in their schoolwork. Data for the study came from focus interviews with 36 informants who were selected through maximum variation sampling according to their age, educational level, and household income.*

### INTRODUCTION

A mobile phone ringing in the classroom is one of the most oft-repeated breaches of netiquette, and research has found that people believe the classroom is among the places in which the mobile phone must not be used (Campbell, 2006). The reasons behind this disapproval of the use of the mobile phone in the classroom include the disruptive nature of ringing alerts for incoming calls and text messages, the tendency of students to fiddle or play with their mobile phones and be distracted from the lecture, and the use of mobile phones for cheating. Initial efforts to ban mobile phones from the classroom, however, have been tempered by the sense of security that the phones afford students and their parents. Moreover, mobile phones provide educational opportunities by facilitating access to informational resources in the Internet and by allowing students to micro-coordinate among classmates for school projects.

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The increasing use of mobile communication technologies in education has expanded the domain of e-learning or learning that is supported by digital electronic tools and media (Milrad, 2003 in Cavus & Ibrahim, 2009). Called mobile learning, or m-learning for short, this relatively new practice is differentiated from traditional e-learning by its portable and wireless platform (Kang, Sung, Park, & Ahn, 2009). Moreover, it facilitates learning that is “self-paced, on-demand and real-time” (Chuang, 2009, p. 51) and enables ubiquitous or anytime, anywhere access to course contents (Al-Fahad, 2008; Kang, Sung, Park, & Ahn, 2009; Suki & Suki, 2007). The emergent attention on m-learning is a function of two developments. Firstly, there is increasing evidence about the viability and flexibility of mobile phones to enrich the learning experience (Al-Fahad, 2008). Secondly, mobile phone penetration rates are high in developed and developing countries (Chuang, 2009), which means there is less need to invest on the purchase of equipment and the training of students to use such equipment. According to Statistics Singapore 2008, Singapore, which is the context of this study, has a mobile phone density of 137 for every 100 people.

Definitions of m-learning, according to Peng, Su, Chou & Tsai (2009), can be grouped into three, depending upon the value of the mobile platform that is highlighted. The first definition focuses on the mobile phones’ functional components, particularly on its ability to facilitate communication wirelessly. The second definition pertains on the portability of the mobile phone which then relates to values such as convenience, expediency, and immediacy which are important to learners and teachers. The third definition relates to the concept of ubiquitous computing. Regardless of their attribute of focus, these definitions remain skewed towards the medium and provide little attention to the pedagogical aspect of the m-learning equation (Peng, Su, Chou, & Tsai, 2009).

Indeed, the literature on m-learning has tended to underscore the technological platform. On the one hand, m-learning is discussed in terms of the choice of technology, particularly as regards the supposed effort by universities to pull students into online environments by investing heavily in their wired Internet infrastructure vis-à-vis the push among students for wireless devices such as laptops and mobile phones (Chuang, 2009; Al-Fahad, 2008) as well as smart phones and other hybrid devices (Cavus & Ibrahim, 2009).

On the other hand, the transition (Fallakhair, Pemberton, & Griffiths, 2007; Wang, Wu, & Wang, 2009) or complementation (Chao & Chen, 2009) between e-learning and m-learning is discussed by comparing the advantages and disadvantages of personal computers with mobile devices, the problems with configuring, reformatting and maintaining content that works across both platforms, and concerns about interoperability issues among the many variants of mobile devices. Collectively, these can then result in duplicated efforts and wasted resources (Goh & Kinshuk, 2006). Researchers have discussed how the effectiveness of m-learning can be weakened by the mobile devices’ physical and functional limitations (Fallakhair, Pemberton, & Griffiths, 2007). These limitations include screen size and audio-visual quality, (Kang, Sung, Park, & Ahn, 2009; Wang, Wu, & Wang, 2009; Lu, 2008), keyboard interface (Kang, Sung, Park, & Ahn, 2009; Wang, Wu, & Wang, 2009), battery life, data security, and processing power (Wang, Wu, & Wang, 2009; Peng, Su, Chou, & Tsai, 2009). These limitations, in turn, can prevent students used to e-learning from transitioning to m-learning (Wang, Wu, & Wang, 2009) as these require them to adopt new learning strategies (Lu, 2008), or preclude the “the effective implementation of new learning paradigms” (Fallakhair, Pemberton, & Griffiths, 2007, p. 312).

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