Chapter 20
Do Students Wish to 'Go Mobile'?
An Investigation into Student Use of PCs and Cell Phones

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ABSTRACT

Handheld devices are increasingly powerful items in terms of both hardware and software. They have ceased being merely tools of mobile telephony, and are now powerful, multi-purpose, mini-PCs. Technology provision within higher education was via clusters of tethered PCs in designated rooms, but an increasing number of universities are trialing the use of handheld devices to deliver mobile learning. The present research study provides a detailed review of the mobile learning literature, and profiles student usage of PCs and cell phones. Student preferences for a homework vehicle are identified. The results demonstrate that students express a clear preference for the cell phone over the PC as a tool of choice, and state a readiness to 'go mobile' with their learning.

INTRODUCTION

NetGen Needs

For today's university students, variously dubbed *the net generation* (Oblinger, 2004), or *net natives* (Prensky, 2004), "technology is an environment" (Hoffman, 2004), no longer simply a tool, or even an agglomeration of tools. Such is the prevalence that some commentators are asserting that today's students are inherently different from those of past generations and that universities need to recognize and address this paradigmatic behavioural shift (Alexander, 2004; Prensky, 2004; Wagner, 2005). University faculty may however lack familiarity with how NetGen students act and interact with and through an increasing range of technologies. To attempt understanding present students and bridge at least some of the generational-technological gap, students' views and perceptions of tools they use needs investigation. The two key research aims of this research study are to: (1) profile student usage of PCs and cell phones with specific reference to usage, experience, proficiency and value

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accorded to the two tools; (2) determine student preferences for future IT tool usage, specifically their preferred choice of homework vehicle.

REVIEW OF LITERATURE

Implications of Introducing Mobile Learning

Recent advances in hardware (PDAs, enhanced gaming machines, smartphones, iPhones, iPad) and the advent of 3rd generation telephony (3G) now enable access to the internet through a range of portable, handheld devices. These are technologies which students are familiar with, are accustomed to using, and which may have considerable potential as tools for delivering learning (Alexander, 2004; Naismith, Lonsdale, Vavoula, & Sharples, 2004; Prensky, 2004; Wagner, 2005).

There have been several substantial literature reviews undertaken of mobile learning in the last decade (Attewell & Savill-Smith, 2003; Cobcroft, 2006; Naismith, Lonsdale, Sharples, & Vavoula, 2005; Savill-Smith & Kent, 2003; Smith, Salaway, & Borreson Caruso, 2009) indicating a considerable recent increase in interest in the field. Traxler (2007) lists a growing number of workshops and conferences that started in 2002 with MLEARN in Birmingham which have grown both in numbers held and which have seen increasing attendances. The first mobile learning handbook was published in 2005 (Kukulska-Hulme & Traxler, 2005).

Mobile Learning for Institutions

A potential benefit for institutions is that in implementing mobile learning, they will be placing themselves "at the forefront of pedagogical practice" (Cobcroft, 2006, p.5), which may garner both respect in the academic sphere and result in positive media coverage. The latter may result in increasing numbers of applicants, a significant factor here in Japan, where the demographic downturn poses a serious and growing threat to educational institutions.

Early literature warned of multiple logistical challenges facing institutions in implementing mobile learning: reliable wireless connection, students forgetting or losing devices, lack of training of support staff, hardware choice, storage of student work, means of teacher feedback to students (Perry, 2003). Wireless connection has since dramatically improved with the advent of 3rd generation telephony, while cell phones have become *smartphones*, with greatly improved hardware and memory, and an array of tools and applications transforming the devices into what are now effectively powerful, portable, handheld, mini-PCs. Issues of hardware ownership (Savill-Smith & Kent, 2003) such as loss and forgetting to bring to class, may now pose less of a problem due to increased cell phone ownership. Storage, plus backing up of student work, and feedback however remain issues that need to be considered prior to implementation of any mobile learning initiative (Vavoula, 2004).

Implications for institutions in terms of physical environment are considerable. Institutions may need to think less of providing computer provision via multiple tethered PCs in PC labs, and envision in terms of 'learning spaces and places' (Oblinger & Oblinger, 2006). Indeed, Alexander (2004), writing as early as 2004, recorded that several colleges were already considering removing capital funding for PC labs.

Mobile Learning for Teaching Staff and Students

Mobile learning may pose an inherent challenge to more traditional modes of teaching (Sharples, 2003; Naismith et al., 2004; Traxler, 2007), as teaching is less teacher-centred, plus responsibility is increasingly devolved to the students. Teachers may struggle to adapt to increasingly situated,