Chapter 5
A Ubiquitous and Pervasive Learning Framework: Linking the Learner, the Workplace, and the Education Institute

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ABSTRACT
This chapter reports on a learning architecture adopting ubiquity and pervasiveness to support communities of learning practice. The research focused on mobile devices that are capable of voice, text, video/photo interactions, and Web access, and how this can cater for the preferred learning styles of the learners while supporting the workplace learning and the educational environment. The research utilised mobile technology for planned and unplanned learning situations via its capability to send and receive multimedia files, Web objects, and live broadcasting. The information and objects created and gathered using mobile technology are in a digital format. This approach allows for customisation and flexible transferability to future intended audiences, planned learning and assessment activities, and workplace learning activities providing an engaging, learner created platform for the mobile generation.

INTRODUCTION
Parents place pressures on their young in regard to individual achievement. They provide televisions and playback devices in their bedrooms, removing them from the communications and the learning that comes from within the family unit. They provide multiple personal technologies such as hand held game stations so they can amuse themselves. You may not even know what music they are listening to any more, thanks to personal music players.

The young of today may be having unsupervised, unmonitored communications with strangers via the Internet, regardless of the dangers. The need that they be contactable in case of an emergency at any time and anywhere, has unwittingly promoted a youth culture with no concern for socially acceptable times of communications.

This has created a generation where individuality is the norm. From their early years we are training young people to be independent in the ways they amuse themselves, socialise and communicate.
The youth of today are the consumers of our generation’s technological revolution backed by investors demanding higher dividends and a bigger share of the market. This has resulted in aggressive marketing tactics aimed at our youth.

Expecting this new “mobile generation” to learn as passive receptors, sitting in rows, learning by rote, and preparing for an exam that may determine career choice, as once was the case, may result in disengagement from the learning process. Traditional educational communication is facing extinction unless we are prepared to adopt the communications media utilised by our youth. If we recognise issues within this generation, then imagine how removed education will be to the next generation if we fail to change practices now.

A convergence of technology has created a society who can access unlimited forms of information, allowing for contextual and relevant content choices to be in the hands of the learner. This generation is in a transitional stage from being the digital generation to the Ubiquitous Generation, driven by the need for content regardless of time or place, with a new paradigm being driven by personalisation, self created content and self publishing. This attraction to self created content and self publishing is evident by the uptake of Web 2.0 technologies such as YouTube and the variety of personal blogs and wikis. The learning architecture presented in this chapter is considerate of available technologies and a self publishing society.

BACKGROUND

In 1984 John Goodlad wrote about the implications of education and schooling in regard to the youth culture of the time. He talks of a generation preoccupied with itself and made up of individuals less influenced by the home, religion and school. These writings bear resemblance to the youth of today and raise the same question that Goodlad (1984) asked. Is school relevant to this new generation?

Comparisons can be made between the changes affecting schooling back in 1984 and the changes affecting our society at present. We have gone through an immense technological advancement over the last 10 years and are now faced with a society that is no longer in awe of wizardry and gimmicky efforts to engage them. In education today, we can run a class with learners accessing the class from anywhere in the world utilising synchronous communications, application sharing, web tours and collaborative editing, something that was only dreamed about in 1984.

Technology Triggering a Generational Divide

Jukes (2005) sees our schools as reflecting our past, our values, our thinking and not reflecting the reality of the world as it is. He believes if we can’t connect with our children and build relationships with them by understanding their learning and communication practices and applying this understanding in the classroom, we have no hope of increasing student achievement, and risk creating a disconnect between the digital native and the school.

Tracey (2004) informs us that this age of technology has limited the exposure of expectations of society in terms of social protocol. The previous social and physical barriers of connectivity have been broken down by the always reachable mindset of young users of this technology as Aakhus & Katz 2002 in Tracey (2004) comment, the taking of calls in a public domain is quite the norm for young people and that such behaviour privatises public spaces.

The Australian Psychological Society (APS) conducted a report on the psychological aspects of mobile phone use among adolescents in Australia. The paper looked at areas such as how mobile phones contribute to the development of social relationships.
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