

## INTRODUCTION: INTERACTIVITY, COLLABORATION AND FEEDBACK WITH EMERGING DIGITAL TECHNOLOGIES

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### INTRODUCTION

According to advocates, a new generation of digital technologies are changing the landscape of educational provision around the world (Solomon & Schrum, 2007). In place of face-to-face or presence-based learning new forms of blended learning have emerged based on the use of Web 2.0 technologies in which students have been turned from so-called passive consumers to active users, generating their own resources with the use of easily manageable content-creation tools (Thomas, in press).

Three of the main aspects of this transformation relate to the potential of the technology to enhance interactivity, collaboration and feedback. This means improving the relationship between learners as well as between instructors and learners. In addition, it means responding to the challenge of providing new frameworks for the assessment of learners dealing with project-oriented work and task-based learning using digital learning technologies.

Advocates of the new technologies suggest that they are supporting and enhancing the development of new approaches to learning, from presence-based classrooms to lifelong access, from blended learning to adult education, all via a focus on an 'anytime, anywhere' approach. These new advances are underpinned by what Castells (2000) calls, in a wider context, the 'network society'.

Socio-economic networks have always existed, yet Castells' notion focuses on the recent development of information networks based on the Internet that is increasingly in evidence in ubiquitous social networking sites such as Facebook and MySpace (Castells, 2001). The new technologies support blended, open and distance learning and the goal of realizing the learning or information society that is accessible 24/7, whether for full-time or part-time students.

If these visions of a learning society are to be achieved however, the challenge is to ensure that the new learning technologies promote rather than inhibit the spread of learning opportunities, rather than merely promising things they cannot deliver.

While the new technologies are finding a niche in the mainstream, they are also being used to re-enfranchise elements of today's disaffected youth, subgroups or minority cultures. The tremendous investment in ICT projects and programs around the world, from the European Union to UNESCO, attest to the role policy makers ascribe to its ability to narrow or span the so-called digital divide and to promote social inclusion (Warschauer, 2003). The major obstacle to this process however, is often the lack of careful planning. New technologies generate a lot of excitement and a lot of funding and sponsorship. Through a lack of strategic planning and concern for appropriate integration, they also generate a lot

resistance, failure and often a considerable waste of resources. ICT equipment can and often is increasingly made available to formerly disenfranchised people, but this access to the physical equipment does little to improve real access if they do not know how to use it, and the trainers have never been trained in the first place. Witness in this respect the One Laptop per Child Foundation and the question of whether transporting western technology to developing and underdeveloped countries will work in cultures with their own well-established pedagogical traditions and histories. The shortcomings of many educational projects based on significant injections of funding stem from being high on good intentions but low on overcoming issues related to training and integration on the ground. As Warschauer suggests, "What is at stake is not access to ICT in the narrow sense of having a computer on the premises but rather access in a much wider sense of being able to use ICT for personally or socially meaningful ends" (Warschauer, 2003, p. 32).

While distance learning took a considerable period of time to achieve validation in the eyes of educational institutions around the world, e-learning has done so within a short period during the 1990s (Keegan, 2005). Nevertheless, a good many problems still surround it, especially the reticence of students to abandon face-to-face learning in its favour, and e-learning programs that are offered 100% online, continue to face issues related to quality assurance, reputation and status. A number of prominent e-learning initiatives such as the UK's much heralded e-University, famously collapsed following an injection of £45m, is one case in point, where hopes far exceeded a firm relationship with market realities.

Nevertheless, over the last five years the combination of wireless technology and mobile computing has been championed by leading

advocates around the world. While the technology promotes improved communication, large multi-national companies such as Nokia and Ericsson have largely ignored or consigned its educational potential to the periphery until quite recently (Keegan, 2005). Nevertheless, according to what Keegan has called his "law of distance research", it is "not technologies with inherent pedagogical qualities that are successful in education, but technologies that are generally available to citizens" (Keegan, 2005, 3). Keegan's law derives from his engagement with the history of distance learning, and he is certain that educational spin-offs occur when the technology is readily available.

The most striking proof for Keegan's law is the potential offered by mobile telephony. With a world population approaching 6 billion, 1.5 billion people already own mobile phones. Recent forecasts from Nokia suggest this will rise to a figure anywhere between three and four 4 billion by 2008. In China, currently that world's largest market, its total number is already 358,000,000, a figure that is growing by an estimated 160,000 everyday. The social importance of such devices makes continued growth in these markets inevitable (Glutz, Bertschi & Locke, 2005). The development of G3 telephony – the use of video, TV, audio, Internet – offers increasingly more potential in the way of educational developments as bandwidth increases.

These developments are being heralded as the next phase in e-learning and promise to initiate a profound transformation in the provision of education, especially in the university sector. Though there have been numerous projects and conferences on the subject of wireless learning, few in-depth studies have as yet been produced.

As evidence of the trend in mobile learning, the European Commission, for example, has recently invested €151 million in mobile and wireless systems

research. Such research has given rise to a new term, Information Society Technologies (IST), whose goal is to examine the learning potential of changes affecting the knowledge economy. Like many of the recent developments in educational technologies however, the initial excitement that propels them forward has been backed by little in the way of sound pedagogical theory.

Wireless campuses, Interactive Whiteboards (IWB), Virtual Learning Environments, laptop programs for students and teachers – such innovations are becoming commonplace across the educational spectrum, from kindergarten to university. Students are increasingly accustomed to 24/7 access to the Internet, wherever they are on campus, in the library, lecture theatre, cafeteria or halls of residence. Teachers are asked to use these new technologies but often they are little more than short-term projects aimed at grabbing headlines or not based on meaningful and sustained professional development for instructors.

As with many examples of new technology, however, these developments have been largely promoted by technologists or even marketing departments with the immediate pedagogical implications of largely secondary importance, left to play catch-up as the technology constantly changes. This is not to say that good pedagogical practices and innovative ways of using the new educational technologies will not emerge, but that the driving force has been to install first and develop an appropriate pedagogy later. The main question now is how technologies can be used to foster effective learning environments? While mobile learning has clearly recognized qualities, such as more flexible access to information, students have to connect with the new technology in clearly defined learning contexts to see its value-added aspects over and above existing technology.

One of the most fruitful disciplines for the new learning technologies has been foreign language learning. The size and dynamism of the foreign language industry places it in a unique position to promote the integration and development of the new technologies. Much of the emphasis of practitioners in this discipline is on promoting language learning in a variety of non-conventional environments, both on and off campus; increasing learner motivation; engaging in cross-cultural exchange; and developing methods for promoting and disseminating communicative based learning materials. The new wave of digital technologies needs to be questioned if pedagogy is to play a leading role in their development. With this context in mind, the series of symposiums on wireless learning, Web 2.0 technologies and second language learning was established in 2007.

### **SECOND INTERNATIONAL WIRELESS READY SYMPOSIUM**

On Saturday 29th March 2008 the Second International Wireless Ready Symposium was held at the NUCB Graduate School of Nagoya University of Commerce & Business in Japan. The event attracted participants and presenters from Asia, Europe and North America. Building on the first conference in March 2007, the Second Wireless Ready Symposium focused on the use of digital technologies in the language classroom, with a special emphasis on wireless and networked learning environments, as well as the broader context of Web 2.0 applications. Three main areas - interactivity, collaboration and feedback - engaged a number of presentations and established a context for the symposium.

The event attracted three international keynote speakers: Michael Coghlan (TAFE Australia), Russell Stannard (Westminster University, UK), and John Collick (Promethean Ltd., UK), as well as a further

seventeen presenters, ranging across themes involving interactive whiteboards (King & Pride; Mantle), classroom response systems (MacLean & Elwood), mobile learning (Robb, Noguchi & Terui), virtual learning environments (Baten) and course management systems (Daniels), social networking software (McCarty), telecollaboration (Foss & McDonald), automated assessment (Cheung), teacher development (Elliott), and Skype tandem projects (Da Vault).

Michael Coghlan's presentation was streamed live into the 3D virtual world of Second Life via a web-based video streaming server from Veodia.com, where over 50 participants from around the world had registered to view the presentation. Coghlan's discussion of mobile learning and technologies established the broad parameters from the succeeding presentations, with both Stannard and Collick examining narrower applications of wireless and networked digital learning environments through their demonstrations of screen recorder software (Stannard) and learner response systems and interactive whiteboards respectively (Collick).

The event remains one of the first to consider the role of Web 2.0 technologies in education to take place in Japan. It is also notable in that this was the first to consider the role of interactive whiteboard technology in foreign language education in Japan. IWBs have yet to establish a firm foothold in schools or universities in Japan and there was considerable interest in their application in foreign languages following the British Council's widespread use of the technology in its centres around the world.

As the papers collected here indicate, digital technologies are quickly changing the landscape of educational provision around the world. These changes must be accompanied by sustained reflection on the changing nature of the learning environments they touch, in relation to interactivity,

collaboration, feedback and assessment. It is hoped that the international Wireless Ready symposia will contribute to these national and international conversations, and raise important questions about future directions in this interdisciplinary field.

As organizer and chair of the organizing committee for Wireless Ready, I am especially grateful to the following people, whose support and contributions made the symposium possible: Dr Hiroshi Kurimoto (President of Nagoya University of Commerce & Business), Kyoko Hayakawa (Director of the Nagoya Graduate School), Andy Halvorsen, Dr Tetyana Sayenko, Professor PingPing Lincoln, Junaid Malik, Dr Elizabeth Richards, and Willialuck Tansiritongchai.

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