

Future possibilities for mobile learning technologies and applications at the University of Southern Queensland, Australia: Lessons from an academic focus group

ABDUL HAFEEZ-BAIG¹ & P. A. DANAHER²

¹ *Faculty of Business*
University of Southern Queensland, Australia †

² *Faculty of Education and Centre for Research in Transformative Pedagogies*
University of Southern Queensland, Australia ‡

Several constraints and opportunities underpin the future possibilities for mobile learning technologies and applications at the University of Southern Queensland, Australia. Drawing on the work of Virilio (1986; Virilio & Lotringer, 1983), the authors analyse a focus group with five Faculty of Education academics as a microcosm of implications for broader policies and strategies at the university. These policies and strategies will not be effective without imaginative and sustained engagement with mobile learning pedagogies at both institutional and individual levels.

1 Introduction

The early 21st century has seen an unprecedented growth in mobile learning technologies, ranging from handheld personal digital assistants (Finn & Vandenham, 2004) to mobile telephones to mobile gaming (Finn, 2005). The impact of these technologies on contemporary Australian society has included school-level education (Goggin, 2005) and preferences for SMS text messaging or telephone calls in initiating romantic relationships (Byrne & Findlay, 2004).

At the same time, technology refusal by educational institutions (Hodas, 1993) demonstrates that those organisations are often slow to embrace the potential pedagogical applications of new technologies. Reasons for such refusal vary from individual conservatism to a concern about possibly lowered standards of achievement to competing financial and political priorities.

These varied institutional responses to the potential of mobile learning technologies and applications in promoting student learning can be seen at the University of Southern Queensland (USQ) in Australia. On the one hand, the university has moved quickly to develop integrated processes and systems to support learning in multiple sites (Smith, 2005). On the other hand, policy-making around teaching and learning, particularly

† abdulhb@usq.edu.au

‡ danaher@usq.edu.au

concerning student assessment, reveals a more cautious approach, influenced by issues such as academic integrity and competing understandings of knowledge construction and communication (see also Moore, Harreveld & Danaher, 2005).

Informed by some key ideas of Virilio (1986; Virilio & Lotringer, 1983) about contemporary technologies, the authors synthesise these institutional challenges and opportunities by means of an analysis of selected elements of a focus group conducted with five academic staff members of the Faculty of Education at USQ. This synthesis reveals a current disjuncture between the academics' lived experiences of using mobile technologies to enact informal learning and their institutionally framed formal teaching and learning based on less mobile technologies. Despite this disjuncture, the authors present the case for bringing the technologies and the pedagogies into closer and more systematic alignment, thereby strengthening the prospects of maximising the pedagogical potential of mobile learning technologies and applications.

2 Conceptualising the Social and Educational Uses of Mobile Technologies and Applications

The conceptual framework informing this account of the social and educational uses of mobile technologies and applications is taken from the French architect and theorist Paul Virilio. The critique by Luke and Tuathail (2000, pp. 364, 366) of some of Virilio's thinking notwithstanding, we find persuasive two key statements associated with his conception of the mobility of both technology and power. Firstly, space "is no longer in geography...it's in electronics" and "The distribution of territory is outmoded, minimal" (Virilio & Lotringer, 1983, p. 115). Secondly, "Territory has lost its significance in favor of the projectile. *In fact, the strategic value of the non-place of speed has definitely supplanted that of place*, and the question of possession of Time has revised that of territorial appropriation" (Virilio, 1986, p. 133; *emphasis in original*).

While Virilio's focus was on warfare, we take from these two statements some important implications for understanding the educational and social uses of mobile technologies and applications. Firstly, there is an explicit binarisation of place and time, with time supposedly becoming more significant as place becomes less so. Secondly, there is a simultaneous politicisation of place and time, so that political interests are advanced and/or threatened by this changing relationship between place and time. Thirdly, a crucial factor in that changing relationship is mobility – the capacity for people and/or objects to move across places at considerable speed.

These various elements – technology, mobility, power, place, time – are also inextricably linked in any contemporary understanding of mobile technologies and applications. For example, Goggin (2005) made the following claim about mobile telephones:

Mobile phones offer new ways of constructing one's identity and belonging to a group, new ways of organising and conducting one's life, new ways of keeping in

touch with friends, romantic intimates, and family, new ways of conducting business, [and] new ways of accessing services or education. (p. 35)

We are not arguing that these mobile technologies and applications are completely independent of, or dislocated from, place; the notions of community and culture associated with place are still very important in these “new ways” of constructing identities and making connections. Nevertheless these new technologies and applications have significantly changed, and in some cases transformed, the ways in which people live, work – and learn.

In that context, it is timely to note the recent identification by Grohmann, Hofer and Martin (2005) of advantages and disadvantages of mobile learning as viewed from multiple perspectives. They listed as advantages:

- Independence from location and time
- Personalised adaptive learning
- Changes in the culture of learning
- Integration into the course of work
- Mobile learning in the context of integrated, blended learning
- Cost reduction.

On the other hand, they listed as disadvantages:

- Lack of automatic competence
- Lack of social contact
- Loss of privacy
- Lack of profitability
- Lack of acceptance
- Lack of standards.

Despite these identified advantages and disadvantages, as Goggin’s (2005) question “...why are we not focussing on the possibilities of mobiles for learning...?” (p. 35) signifies, there is an evident ‘time lag’ between informal and social take-up of these mobile technologies and applications and their deployment in educational settings. As both Goggin’s response to that question and Virilio’s (1986; Virilio & Lotringer, 1983) analysis of contemporary technologies make clear, there are several possible explanations of this time lag. The technology refusal noted by Hodas (1993) reflects a certain conservatism in educational institutions; there is a potential privileging in such institutions of ‘high culture’ texts such as canonical books over ‘low culture’ texts such as SMS messages; and there is also a tendency in such institutions to seek to defend and protect the political authority attending the teaching, assessment and certification of a curriculum. The deterritorialisation of mobile technologies and applications leads to their potential role as agents of democratisation (at the same time that they help to promote capitalism [Goggin, 2005, p. 35]) that is not always welcome in political structures such as educational institutions.

Yet both Goggin's (2005) and Virilio's (1986; Virilio & Lotringer, 1983) analyses highlight also the potential educational impact of contemporary technologies. Technology refusal (Hodas, 1993) notwithstanding, technologies have a tendency of 'spilling over' from the social into the educational domains, and they often have enthusiastic champions in the form of educators, managers and/or technicians. This tendency is consistent with an understanding of educational futures as impinging simultaneously on multiple arenas of living, learning and working.

3 Findings of an Academic Focus Group at USQ

The focus group reported here was conducted in October 2006 and with two other focus groups (one with students, the other with academics from a different faculty) was part of the first of two data gathering phases in a qualitative case study conducted by the authors at USQ. The aim of the first phase was to elicit participants' perceptions and experiences of using mobile technologies and applications in formal and/or informal teaching and learning.

The five participants in this focus group were all academic staff members of the Faculty of Education at USQ. This approach was used partly for convenience and partly in order to obtain an in depth understanding of a single faculty whose representatives on this occasion exhibited considerable diversity in terms of discipline, experience and mode/s of teaching. Only a small selection of the participants' words can be analysed here; that selection has been made on the basis of its articulation with the conceptual and substantive issues identified earlier and its potential significance for implications related to future possibilities for mobile learning at USQ.

There was evidence in the focus group of varied levels of experience and expertise with using mobile technologies and applications informally. One participant stated, "I learn a lot from my sons..." (Academic 2); another referred to working at home and in meetings on campus and asserted that "...it means you can work on the run" (Academic 4); and yet another revealed that at home he had two computers, with his three daughters using the main one: "It really is quite fascinating" (Academic 3). He used the "Inspiration" concept mapping program because "I think that way" and he used his personal digital assistant as a calendar and to provide alarmed reminders about forthcoming meetings: "I'm experimenting with it at the moment" (Academic 4). Not all technologies mentioned were mobile and the participants were not equally well-versed in using contemporary technologies; at the same time, the potential educational and social utility and impact of such technologies were clearly of interest to all participants.

The focus group participants identified a number of institutional barriers to the more systematic implementation of mobile technologies and applications in teaching and learning at USQ. One participant noted that, whereas "Students...[have] grown up with these things", "These things are quite costly...in time as well as money" (Academic 5). Likewise "You do have to be a sophisticated consumer [of technologies] today" (Academic 3). On the other hand, there was a generally implicit acceptance that

individual academics were sometimes slow to pursue the pedagogical opportunities afforded by such technologies: “More time to digest the information” (Academic 5) would help at least one participant to do so.

A number of comments in the focus group related to broader educational and social issues, with concerns about access and equity to the fore. For example, in relation to the digital divide between the ‘haves’ and the ‘have nots’, “I’d hate to think we are actually widening the gap” and “We don’t necessarily...take into account the needs of people – [of] everyone – ” (Academic 1). Moreover, “I think location has a lot to do with this” (Academic 2), and academics deal “with ever increasing difficulty” (Academic 1) with geographically remote students.

There was a lively discussion of the future pedagogical possibilities of using mobile technologies and applications more formally and systematically to promote teaching and learning at USQ. “If I was a student, I would appreciate being able to take my laptop to a lecture” (Academic 3) in order to refer to something online related to the content of the lecture. Furthermore, “My vision would be...” where students could pull down the desk and “have access to all aspects of what we’re talking about” in the lecture (such as access to the online version of the course being studied) “...because it has to be right there – it has to be accessible in digital form” (Academic 3) by being embedded in digital documents. “You could even have discussion groups going while you are having the lecture” as an effective way of connecting students during lectures “...and actually adding things in for discussions later on” (Academic 3).

Finally, the focus group participants elaborated a number of pre-requisites to these kinds of pedagogical possibilities becoming realities at USQ. One participant noted, “Administratively it becomes very difficult for me to manage...” (Academic 5) assignment submission choice in large courses; “So that prevents us from trying different things and being creative...” (Academic 5). The comment that “I don’t think we know” (Academic 2) about students’ access to technologies indicated that more extensive and robust data were needed about this issue; this concern was shared by the Student Equity Network, which had “...a social justice responsibility and an access and equity responsibility” (Academic 1). This linked with the contention that “You can’t divorce technology from its social context” (Academic 3) and also with the hope, if not the experience, that “Technology should make...[teaching and learning] easier, not harder” (Academic 3). Overall there was agreement that “We’d be foolish not to run with technology – whatever it provides” (Academic4).

At one level, this necessarily selective analysis of the focus group participants’ voices demonstrates both the diversity and the depth of their experiences with mobile technologies and applications, with at least some having sufficient informal knowledge to incline them to explore the pedagogical possibilities of a more formal and systematic implementation of such technologies and applications for teaching and learning at USQ. There was therefore a foundation of goodwill that suggested that they would be prepared to explore specific policies and strategies more thoroughly, despite or because of their concerns about the potential marginalisation for some students arising from that

implementation. There was also a preparedness to become pedagogical innovators and pioneers in pursuing mobile learning – up to a point.

That point of the outer limit of tolerance evokes the other focus of concern in this paper: the institutional. The participants' voices about mobile technologies and applications were filtered through their concerns about workload intensification, increasing demands from students and supervisors alike, multiple teaching modes and scarce resources. Thus, while the participants' discourse manifested a number of the themes arising from the work of Virilio (1986; Virilio & Lotringer, 1983) – technology, mobility, power, place, time – and while that discourse also reflected explicitly or implicitly the advantages and disadvantages of mobile technologies and applications elaborated by Grohmann, Hofer and Martin (2005), there was countervailing evidence of the difficulties attendant on extrapolating this individual interest and enthusiasm to a whole-of-institution adoption. Yet if such an adoption does not eventuate it is likely that the individual commitment will wither under the larger pressure of competing priorities. This would be an unfortunate outcome, given the potential educational and social benefits of a broader institutional and individual engagement with mobile learning technologies and applications.

4 Conclusion: Implications for Future Possibilities for Mobile Learning at USQ

The preceding analysis of selected elements of the focus group conducted with five academic staff members in the Faculty of Education at USQ presents a challenge to university decision-makers in relation to mobile technologies and applications. On the one hand, there is the opportunity to bring teaching and learning policies and practices into closer alignment with these academics' and their students' lived experiences of such technologies being embedded in their daily lives, thereby taking a proactive approach to fostering the development of effective pedagogies and engaging with the potential for speed and unpredictability represented by these technologies (Goggin, 2005; Virilio, 1986; Virilio & Lotringer, 1983). On the other hand, the focus on security and stability (while laudable from an institutional perspective) and the discursive dissonance (Harreveld, 2002) in policy and other statements about teaching and learning at USQ highlighted in the authors' previous paper (Danaher & Hafeez-Baig, 2006) suggest that this opportunity might not be perceived as such and therefore might not receive the attention and priority that we argue that it warrants. Indeed, we contend that imaginative and sustained engagement with mobile learning pedagogies at both institutional and individual levels is crucial if such a regrettable outcome is not to eventuate. These were some of the lessons that we have learned from an academic focus group.

Technology is one of the main drivers of the existing mixed mode and flexible learning environment in universities today. There is a need to develop pedagogies that marry most effectively traditional approaches to teaching and learning with more contemporary concepts of e-learning, flexible and online learning and virtual campuses. Drawing on this paper, the authors are currently preparing to conduct the second phase

of data gathering in this research project, which is to design, test and apply a survey questionnaire instrument in order to discern wider community views of the relevance and utility of mobile technologies and applications. From this it is hoped to generate evidence-based policy recommendations whereby these technologies and the associated pedagogies can underpin the enactment of teaching and learning that are technologically enhanced, socially responsive and institutionally engaged – and that are in addition secure and stable but also speedy and unpredictable.

References

- Byrne, R., & Findlay, B. (2004). Preference for SMS versus telephone calls in initiating romantic relationships. *Australian Journal of Emerging Technologies and Society*, 2(1). Retrieved July 23, 2005, from http://www.swin.edu.au/sbs/ajets/journal/issue2/abstract_sms.htm
- Danaher, P. A., & Hafeez-Baig, A. (2006, June 15). Wireless technologies and lifelong learning pedagogies: Institutional challenges and opportunities at the University of Southern Queensland. Paper presented at the 4th international lifelong learning conference, Rydges Capricorn International Resort, Yeppoon, Qld.
- Finn, M. (2005). Gaming goes mobile: Issues and implications. *Australian Journal of Emerging Technologies and Society*, 3(1). Retrieved July 23, 2005, from http://www.swin.edu.au/sbs/ajets/journal/issue4/abstract_104Finn.htm
- Finn, M., & Vandenham, N. (2004). The handheld classroom: Educational implications of mobile computing. *Australian Journal of Emerging Technologies and Society*, 2(1). Retrieved July 23, 2005, from http://www.swin.edu.au/sbs/ajets/journal/issue2/abstract_handheld.htm
- Goggin, G. (2005, March). Mobile learning. *Professional Educator*, 4(1), 35-37.
- Grohmann, G., Hofer, A., & Martin, G. (2005, July 11). ARIS MOBILE: Helping to define the future of mobile learning. Paper presented at the 4th international conference on mobile business, University of Technology, Sydney, NSW.
- Harreveld, R. E. (2002, October). Brokering changes: A study of power and identity through discourses. Unpublished Doctor of Philosophy thesis, Faculty of Education and Creative Arts, Central Queensland University, Rockhampton, Qld.
- Hodas, S. (1993, September 14). Technology refusal and the organizational culture of schools. *Education Policy Analysis Archives*, 1(10). Retrieved April 9, 2005, from <http://epaa.asu.edu/epaav1n10.html>
- Luke, T., & Tuathail, G. O. (2000). Thinking geopolitical space: The spatiality of war, speed and vision in the work of Paul Virilio. In M. Crang & N. Thrift (Eds.), *Thinking space* (pp. 360-379). London and New York: Routledge.

Moore, T. G., Harreveld, R. E., & Danaher, P. A. (2005, April 13). Australian university academics' undergraduate distance and online course assessment tasks: Educational quality versus institutional governmentality. Paper presented at the annual conference of the American Educational Research Association, Ritz Carlton Hotel, Montreal, Canada.

Smith, A. (2005, March). Using integrated enterprise systems to achieve strategic goals: A case study of a dual mode university. *International Review of Research in Open and Distance Learning*, 6(1). Retrieved July 23, 2005, from <http://www.irrodl.org/content/v6.1/smith.html>

Virilio, P. (1986). *Speed and politics*. New York: Semiotexte.

Virilio, P., & Lotringer, S. (1983). *Pure war*. New York: Semiotexte.

Acknowledgements

The authors are grateful for the constructive feedback of two anonymous referees on an earlier iteration of this paper and to the conference proceedings editors for their encouragement and support. The paper is a significantly revised version of a previous conference paper (Danaher & Hafeez-Baig, 2006); the authors acknowledge the helpful ideas of audience participants at that presentation. The five participants in the focus group reported here, and Ms Christine Knight and Mr Robert White as research assistants in the broader project, have made an indispensable contribution to the research. Funding for the project was provided by the Faculty of Education at the University of Southern Queensland, Australia.