



## Changing student learning preferences: what does this mean for the future of universities?

**Trish Andrews**

Teaching and Educational Development Institute (TEDI)  
The University of Queensland

**Belinda Tynan**

University of Southern Queensland

Learner preferences appear to be changing and there is some evidence that students are seeking a different kind of learning experience than currently commonly available. This paper provides a brief discussion of changing student learning preferences and suggests that these are being driven by the accessibility and characteristics of available and emerging technologies, rather than by technological determinism. The paper also suggests that, in many ways, the majority of higher education institutions are ill-prepared for these changes and that a gap is emerging between student expectations and student experience. It is proposed that students are looking for more connected and mobile learning opportunities and that 'loose networks' are playing an increasingly important role in supporting learning. The paper discusses the implications these changes have for institutions and suggests that while universities face challenges they also have choices.

Key words: learner preferences; mobile learning; social networking; loose networks.

### Introduction

The ownership of mobile technologies is becoming increasingly widespread and many of these devices enable ease of access to a range of tools including social networking tools and rich media experiences (Traxler, 2011). The statistics indicate that this growth in ownership and use of these tools, while more widespread amongst young people (Jones, 2011), is by no means confined to this group, with many older people both going online and participating in social networking activities (Lenhart, Purcell, Smith & Zickhur, 2010). This growing use of technology by students of all ages, is having an impact on teaching and learning as students are increasingly seeking to use their own technologies (Andrews & Tynan, in press; van der Werf & Sabatier, 2009) to engage in a range of academic activities. As Williams, (2011), points out, students are looking for more engaged learning experiences using these tools and a move beyond the strong focus on delivery of information that still dominates much of higher education teaching.

## **Technological determinism versus ‘networked individualism’.**

Over the last decade the notion of the ‘Net Generation’ as a homogeneous, wired, group with high-level digital skills has gained currency and persisted (Tapscott, 2009; Oblinger & Oblinger, 2005; Prensky, 2001). This has influenced much thinking and debate around the provision of education for this generation, including the need to focus on greater engagement for these learners. This view takes a technological determinist approach, which suggests:

The ubiquitous nature of certain technologies, specifically gaming and the Web, has affected the outlook of an entire age cohort in advanced economies (Jones, 2011, p. 42).

However, there is substantial evidence emerging that this group in fact demonstrates considerable variation in the ways in which they use technology and much recent research has sought to refute the notion of homogeneity and to highlight the diversity within this group (Jones et al., 2010; Kennedy et al., 2009; Fitzgerald & Steele, 2008).

Further, as Jones (2011; 2010) suggests, rather than a generation being defined by the time into which they were born, it is the technology itself that is affording change:

The new technologies emerging with this generation have particular characteristics that afford certain types of social engagement. (Jones, 2011, p. 42).

This position is supported by emerging evidence that learners of all ages are embracing technology and are aware of the opportunities that mobile and web 2.0 technologies offer them to support both mobile and connected learning (Andrews & Tynan, in press; Williams, 2011).

### **Students’ use of their technologies for teaching and learning**

Recent research by the first author found that students are tending to use technology for teaching and learning activities in a number of interesting ways (Andrews & Tynan, in press), the first being individuality in this use. Students are demonstrating a high level of distinctiveness in their use of ICT to fit learning into their busy lives. As learning environments are become increasingly mediated by technology and students are heavily committed with families, work and other pressures they are utilising technology to engage in learning in very different ways.

The second way students are utilising technology has to do with mobility and connectedness. While concentrated learning is still important, they also appear to plan and manage their learning in smaller mobile bites. Few students are without devices that allow them to connect to the internet and access their learning, while on the move. As mentioned previously, the use of both mobile devices and social networking is increasing across all aspects of learners’ lives regardless of age. Use of students’ personal technology for learning purposes is evolving. Madge et al., 2009 found that on-campus students are using Facebook for mainly social purposes. Selwyn (2007), however found that while the primary use of Facebook for on-campus learners was social support, he also found that they used it for a range of transactional activities and low level teaching and learning activities. These activities included:

- Recounting and reflecting on the university experience
- Exchange of practical information
- Exchange of academic information
- Displays of supplication and/or engagement
- Banter.

The third way students are using technology is in regard to resourcefulness and this is resulting in a shift away from using social networking tools as largely tools for social interactions, albeit, at times around issues related to learning (Selwyn 2007). Learners are seeking out their peers as a first point of call to resolve problems. As

Andrews & Tynan (in press) found, distance learners of all ages are appropriating Facebook and other social networking tools to support a range of teaching and learning activities including online discussion forums, creating repositories for learning artefacts and supporting special interest groups. Additionally Andrews & Tynan (in press) found that the use of 'loose networks' (Traxler, 2011) was used by students to support a variety of informal learning activities. Jones, (2011) also comments on the emergence of 'loose networks'. While little is understood yet as to how these networks operate, the availability of mobile and social networking tools appear to enable to students 'dip in and out of' activities and engage with a range of different peer learners to support particular learning needs (Andrews & Tynan, in press; Traxler 2011) as and when it suits. Meeting the diversity of student needs in this regard will become a challenging issue for curriculum designers and teachers. As Anderson (2008) has already pointed out, diversity in the need for connectedness will increase the difficulties faced by institutions in meeting the range of learner needs.

### **An emerging gap**

Tools such as Facebook, Twitter, SMS and Skype are freely available to students and along with widespread ownership of mobile devices is providing an endless range of affordances for use for both personal and learning activities that students are increasingly appropriating. Hughes, (2009) suggested that the ways in which learners might want to learn and the ways in which universities are providing learning is creating a disjunct for learners. Despite the rapid acquisition of technology and the increasing focus on blended learning, most universities remain largely mired in a 20<sup>th</sup> century approach to pedagogy which focuses on transmission of knowledge. While technology is widely adopted and used across the sector, it still serves mainly as a means of delivering information rather than supporting and fostering engagement (McKeogh & Fox, 2009). The affordances of Web 2.0 tools are clear to many students (Andrews & Tynan, in press; Williams 2011) but mostly overlooked by the majority of lecturers (McKeogh & Fox, 2009; Lonn & Teasley, 2009). Although technologies such as learning management tools including Web 2.0 tools are widely available, most teachers simply adapt the basic aspects of these technologies to their existing teaching and learning practices, rather than change the way they are teaching to make more effective use of the technology to enhance learning (Gosper et al., 2009).

Further to this, Hughes (2009) also suggested that while the current generation of learners appeared to be tolerating this disjunct, the next generation might not be so accommodating. There is evidence emerging, however, that the current cohorts of students, regardless of any generational orientation in relation to using technology (Jones, 2011), want to learn differently and are already actively seeking changes to the ways their learning is provided to them (Andrews & Tynan, in press; Ram, 2010).

However, although recognising that change is occurring in the world at large, institutions have been generally slow to respond to changing learner preferences. Supporting Gosper et al's. (2009), observation in relation to the reluctance of many staff to change their practice to integrate new technologies Elhers & Schneckenberg (2010) point out that there is a general lack of interest and engagement by many staff in using technology effectively for teaching and learning activities. The situation is compounded by a general lack of attention to quality considerations for online learning and universities may not have strategic plans to address a changing environment. Consequently, these factors can cause paralysis in many institutions (Elhers & Schneckenberg, 2010) limiting their ability to respond to the changes occurring as a consequence of the ways technology is increasingly being used in the broader society how this is impacting on universities.

### **The implications for learning in higher education**

Some commentators (Bates, 2010; Ram, 2010; Williams 2011) suggest that given the availability of information enabled by ease of access to the internet and the ways in which mobile technologies and social networking tools support activities such as knowledge construction, that the future of universities as we know them will inevitably have to change:

There is little doubt technology is not only changing the way we teach and learn, it is also challenging centuries-old academic structures and practices, the very notion of what it means to be literate and, potentially, the primacy of universities as the world's arbiters and repositories of knowledge (Williams,

2011, p12).

Bates, (2010) suggests that institutions have an emerging responsibility to ensure that all stakeholders involved in the student learning journey are cognisant of the way in which knowledge, its access and production is changing. Furthermore that the ways in which we teach may need to be altered and reconsidered alongside this. Further to this, Salmon, (2010) suggests that universities might a focus on 'capacity building, partnerships and collaborations' (p.40). This focus could enable the sector to more effectively support both learners and staff needs.

From this perspective, taking a proactive position and providing a responsive culture and policy environment (Elhers & Schnekenberg, 2010) that has a focus on meeting students expressed learning preferences appropriately, could be seen as a viable way forward for institutions. This does not suggest that universities should respond uncritically to students changing expectations. Indeed, as Salmon (2010) suggests 'A more sophisticated and involved view of the 'net generation' and its need for learning needs to be taken (p.40).

However as Bates (2010) points out, the nature of most institutions means that these kinds of activities and associated changes will not necessarily occur in many institutions. To address this, amongst other strategies he suggests that support from government agencies will be necessary. This might include the provision of greater incentives for institutions to change, appropriate credentialing for university teachers and improved recognition of and incentives for innovations in university teaching,

## Conclusion

This growing ownership and use of technology by learners of all ages, is having an impact on teaching and learning as students are increasingly seeking to use their own technologies. They are mobile, connecting in ways in which we do not fully understand and are resourceful in doing so. Knowledge construction is moving into new areas outside the control of academics. Most institution are struggling to address the changes currently occurring as a consequence of the widespread availability and use of technology. However, along with improved understandings of the learning needs of those entering universities (Andrews & Tynan, in press) more strategic approaches to innovation supported by appropriate Government incentives can be seen as possible strategies for minimising the gap between learner expectations and institutional responses.

## References

- Bates, T. (2010). *A critique of Tapscott & Williams' views on university reform*. [www.tonybates.ca/2010/02/14/a-critique-of-tapscott-and-williams-views-on-univeristy-reform](http://www.tonybates.ca/2010/02/14/a-critique-of-tapscott-and-williams-views-on-univeristy-reform) (accessed 15 June, 2011).
- Bates, T. (2010) . New Challenges for Universities: Why They Must Change. In Elhers, U.D. & Schnekenberg, D. (Eds.), *Changing Cultures in higher Education: Moving ahead to future learning*. Berlin: Springer.
- Hughes, A. (2009). *Higher Education in a Web 2.0 World: Report of an independent Committee of Inquiry into the impact on higher education of students' widespread use of Web 2.0 technologies*, JISC. <http://www.jisc.ac.uk/publications/documents/heweb2.aspx>
- Ehlers, U.D. & Schnekenberg, D. (2010). Preface. In Elhers, U.D. & Schnekenberg, D. (Eds.), *Changing Cultures in higher Education: Moving ahead to future learning*. Berlin: Springer.
- Jones, C. (2011). Students the Net Generation and Digital Natives: Accounting for Educational Change. In M. Thomas (Ed.), *Deconstructing Digital Natives: Young people, technology and the new literacies*. Routledge: New York.
- Jones, C., Ramanau, R., Cross, S. & Healing, G. (2010). Net Generation or Digital Natives: Is there a distinct new generation entering university? *Computers and Education*, 54 (2), 722-732.
- Gosper, M., Green, D., McNeill, M., Phillips, R. A., Preston, G. & Woo, K. (2008). *Final Report: The Impact of Web-Based Lecture Technologies on Current and Future Practices in Learning and Teaching*. Sydney: Australian Learning and Teaching Council.
- Kennedy, G., Dalgarno, B., Bennett, S., Gray, K., Judd, T., Waycott, J., Chang, R., Bishop, A., Maton, K. & Krause, K-L. (2009). *Education the net generation: Implications for learning and teaching in Australian*

- Universities: Final report*. Sydney: Australian Learning and Teaching Council.
- Kirkwood, A. (2000). Learning at home with information and communication technologies. *Distance Education*, 21(2), 248-259. <https://doi.org/10.1080/0158791000210204>
- Lenhart, A., Purcell, K., Smith, A., & Zickhur, K. (2010). *Social media and Young Adults Report*, [http://67.192.40.213/~media/Files/Reports/2010/PIP\\_Social\\_Media\\_and\\_Young\\_Adults\\_Report\\_Final\\_wit\\_h\\_toplines.pdf](http://67.192.40.213/~media/Files/Reports/2010/PIP_Social_Media_and_Young_Adults_Report_Final_wit_h_toplines.pdf) (accessed 6 May, 2011).
- Lonn, S. & Teasley, S. (2009). Saving time or innovating practice: Investigating perceptions and uses of Learning Management Systems. *Computers and Education*, 33(3), 686-694.
- Madge, C., Meek, J., Wellens, J. & Hooley, T. (2009). Facebook, social integration and informal learning at university: It is more for socialising and talking to friends about work than for actually doing work. *Learning, Media and Technology*, 34(2), 141-155. <https://doi.org/10.1080/17439880902923606>
- McKeogh, K. & Fox, S. (2009). Academic staff in traditional Universities: Motivators and Demotivators in the Adoption of ELearning. In Bernath, U., Szucs, A., Tait, A. & Vidal, M. (Eds.). *Distance and ELearning in Transition: Learning Innovation, Technology and Social Challenges*. London: Wiley-ISTE.
- Oblinger, D.G. & Oblinger, J.L. (2005). *Educating the net generation*. An Educause e-book publication. Available from: <http://www.educause.edu/ir/library/pdf/pub7101.pdf>
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*. NCB University Press, 9(5).
- Ram, A. (2010). Massively Multiplayer Online–Learning? blog posting. *Cognitive Computing: A Research Blog by Ashwin Ram*, <http://cognitivecomputing.wordpress.com/2010/04/26/massively-multiplayer-online%E2%80%94learning/> (accessed 6 June 2011).
- Salmon, G. (2010). Learning Innovation for the Twenty First Century. In Elhers, U.D. & Schneckenberg, D. (Eds.), *Changing Cultures in higher Education: Moving ahead to future learning*. Berlin: Springer.
- Tapscott, D. & Williams, A. (2010). Innovating the 21<sup>st</sup> century university: It's time. *Educause Review*, 45 (1), 17-29.
- Traxler, J. (2011). Education and the Impact of Mobiles and Mobility. In B. Bachmair, (Ed.), *Medienbildung in neuen Kulturräumen (trs. Media literacy in new cultural spaces)*, Weisbaden: VS-Verlag für Sozialwissenschaft, pp. 103 – 113. [https://doi.org/10.1007/978-3-531-92133-4\\_7](https://doi.org/10.1007/978-3-531-92133-4_7)
- Van Der Werf, M. & Sabatier, G. (2009). *The College of 2020: Students*. Chronicle Research Services. <http://research.chronicle.com>.
- Williams, L. (2011). University of the Future is here. *Uniken*, Autumn, 11-14, <http://www.unsw.edu.au/news/pad/uniken.html>, (accessed 6 June 2011).

**Please cite as:** Andrews, T. & Tynan, B. (2011). Changing student learning preferences: What does this mean for the future of universities? In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions. Proceedings ascilite Hobart 2011*. (pp.118-122). <https://doi.org/10.14742/apubs.2011.1777>

Copyright © 2011 Trish Andrews & Belinda Tynan.

The author(s) assign to ascilite and educational non-profit institutions, a non-exclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to ascilite to publish this document on the ascilite web site and in other formats for the *Proceedings ascilite Hobart 2011*. Any other use is prohibited without the express permission of the author(s).