Exploring the Educational Potential of Social Networking Sites: The Fine Line between Exploiting Opportunities and Unwelcome Imposition

Don't believe the hype! (Public Enemy, 1988)

Henk Huijser University of Southern Queensland

Abstract

This paper explores potential educational applications of Web 2.0 technologies, and cuts through some of the hype generated around these technologies, as well as around characteristics of Generation Y, and their implications for learning and teaching. Web 2.0 technologies both reflect and drive a blurring of the lines between students and university educators, which has a potentially profound impact on learning and teaching in higher education. This paper argues that Web 2.0 technologies, and Social Network Sites in particular, offer exciting opportunities but that educational applications of these technologies should be based on sound pedagogical principles and driven by empirical research and careful evaluation, if they are to effect meaningful learning experiences for all students.

This article has been peer-reviewed and accepted for publication in *SLEID*, an international journal of scholarship and research that supports emerging scholars and the development of evidence-based practice in education.

© Copyright of articles is retained by authors. As an open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings. ISSN 1832-2050

Introduction

Social networking sites such as MySpace and Facebook are part of a larger suite of recent Internet technologies that collectively fall under the Web 2.0 header, along with blogs and wikis (boyd & Ellison, 2007). There are clear indications that these technologies are broadly embraced by a new generation of students, variously called Generation Y, Digital Natives (Prensky, 2001) and the Net Generation (Oblinger & Oblinger, 2005), which raises a number of important questions about their educational potential. Most fundamentally, Web 2.0 technologies break down long-established boundaries on a number of levels, for example, between consumers and producers, and between private and public space. This paper raises the question of whether they also break down the boundaries between learning spaces, work spaces and private spaces, and where social spaces intersect and overlap with learning spaces. This is an important question when university educators consider the potential of these technologies, and it relates directly to the changing role of higher education. For example, if Web 2.0 technologies indeed break down the boundaries between learning spaces, work spaces and private spaces, then learning itself needs to be conceptualised as far more fluid than it has hitherto been, and as more integrated into a lifelong learning journey, rather than confined in terms of time and space. But most importantly, learning would then no

longer be restricted to a particular timeframe or period, such as the three or four year degree, nor to a specific learning space, whether online or made of 'bricks and mortar.' Given that the implications of Web 2.0 technologies tend to be directly linked to Generation Y/ Net Generation characteristics (Oblinger & Oblinger, 2005), a generation born roughly after 1980, this paper will address the implications of such generational links in the context of a changing global higher education environment.

Web 2.0 and Social Networking

Collectively, Web 2.0 technologies constitute a major shift in the way the Web is used (boyd, 2008). More importantly from an educational perspective, Web 2.0 technologies offer major opportunities for the way in which they *could* be used. This is not to say that the technology necessarily drives these changes in a technologically-determinist sense, but rather that educators could potentially seize on the ways in which these technologies are already being used by Generation Y, and appropriate and guide this usage into particular directions. This is rather different than arguing that Generation Y is completely distinct from previous generations (Prensky, 2001) and therefore needs a completely new approach. Historically, new technologies have always generated considerable hype and accompanying calls for complete overhauls of education systems (Dreyfus, 2001). In the case of Web 2.0 technologies, some of the excitement is certainly justified. However, there is a need for caution and careful consideration of what it is we want to achieve by using these technologies for educational purposes. For example, Dreyfus rightly points out that much of the transformation driven by the Internet in general constitutes a transformation in the "method of communication." This in turn leads him to question "what proposed method of education generates all this excitement?" (2001, p. 30, emphasis in original). Although Web 2.0 technologies have largely developed after Dreyfus posed this question, it is still an urgent question in the current context.

According to Batson (2008), "the most significant fact about Web 2.0 for educators is that key functions and intelligence have moved or are moving from the desktop to the Web, and by doing so they have changed" (para. 1). He stresses the social implications of this movement. "Those functions and intelligence are no longer just about personal productivity, but about the social context for information - what other people think about the information" (Batson, para. 1, emphasis in original). De Byl and Taylor (2007) focus on this social context by referring to a "Web 2.0 ethos, centering on the idea of a collective intelligence which evolved from hyperlinking, web services, platform-independent software, re-usable and re-mixable content and, above all, user participation" (p. 110). The two central concepts here are collective intelligence and user participation, as these have seriously blurred the boundaries between knowledge management and dissemination. As Batson states, "if we accept that all learning is social, Web 2.0 may be more in step with learning reality than the book or the PC" (para. 2). Clearly, the development of a Web 2.0 ethos is to an important extent driven by the affordances of the technologies themselves. Whether it is a wiki, a blog, or a photo sharing site like Flickr, the ways in which each of these is structured invites certain uses, which are all social in nature. Once the technologies are there, the ways in which they will actually be used, and the extent to which they will be used, are highly unpredictable, which is exemplified if we focus specifically on social network sites (SNSs).

boyd and Ellison (2007) define social network sites as "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded

system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" (para. 4). They deliberately use the term "social network site", rather than "social networking" because their research shows that these sites are primarily used to maintain pre-existing social networks, rather than create new ones. "What makes social network sites unique is not that they allow individuals to meet strangers, but rather that they enable users to articulate and make visible their social networks" (boyd & Ellison, 2007, para. 6). This is a very important distinction, as it appears to contradict the central tenet of the potential educational application of SNSs, namely that they would allow for the development of extended social and peer networks, which could transcend current boundaries around university programs and courses. Batson (2008) argues in this respect that:

Web 2.0 is becoming a tipping point for creative energy in higher education's use of technology, moving its center from the campus desktop or server to the Web. Web 2.0 moves information technology from the stage of managing and reinforcing the status quo in higher education (e.g. course management systems) to the next stage of providing a millennial re-structuring of the philosophical understanding of knowledge. (concluding para.)

While this offers exciting opportunities, and while it is undeniably Generation Ydriven, it can at the same time be perceived as a threat, and indeed it frequently is. The way in which individual university educators deal with Wikipedia for example, exemplifies this anxiety. While some allow their students to use Wikipedia as a millennial source of knowledge, and thus part of Generation Y's 'natural environment', others ban their students from using it altogether (Frean, 2008). Still others adopt a more considered approach. Brabazon argues for example that "students live in an age of information, but what they lack is correct information. They turn to Wikipedia unquestioningly for information" (cited in Frean, para. 10). "The younger generation has a level of comfort with technology but not necessarily an intimate understanding" (Goodall, 2008, para. 4). The trick is to teach them how to use it properly, and in a critical way. "Google is filling, but it does not necessarily offer nutritional content" (Brabazon, cited in Frean, para. 6). The onus is then on educators to take control of and responsibility for teaching students to be dynamic and critical thinkers within their own authentic online spaces, rather than decrying such spaces and risk becoming irrelevant. The former approach could be most productive in that it does not condemn the technology that Generation Y has taken ownership of, nor does it blindly celebrate it, but instead it attempts to exploit its educational possibilities by taken a certain amount of control over such technologies.

In his comments on a recent report entitled *Social Software for Learning: What is it, why use it?* (Leslie & Landon, 2008), Olcott (2008, personal communication, January 22) addresses this oscillation between opportunity and threat in more detail:

The recent, and undeniably massive, growth in adoption of various social software applications represents both an opportunity and a threat to institutions and educators: opportunity because the qualities which help these applications thrive, align well with socialconstructivist and other contemporary theories of learning which have resonated strongly with online educators and learners and sparked massive interest and growth in adoption; threat in part because they are often developed and adopted by learners outside the bounds of their formal relationships with institutions, and in part because they depend on network characteristics that can be in tension with the more 'closed' environments and online approaches found within most institutions.

The main threat of using SNSs in an educational context arises from a perceived lack of control over the educational space, because of the public nature of such sites, contrasting sharply with more traditional closed environments such as learning management systems. "The closed nature of the learning management system is frequently defended on the ground that students need a safe environment where they can experiment without consequences" (Downes, 2007, para. 19). The reality is that Generation Y students, by enthusiastically adopting SNSs, already operate in (semi-)public spaces in their everyday practices, and consequently, "students may be more motivated to do well when they are required to present their work in public or to participate in the wider professional community" (Downes, para. 19). The specific and most prevalent characteristics of practices on SNSs are profiles, friends and comments, and "what makes these three practices significant for consideration is that they take place in public" (boyd, 2008, p. 125). This is not 'public' in the traditional sense of the word, but it is 'public' in a highly mediated sense, which again poses threats as well as opportunities. While more traditional mediating technologies like television and radio, are characterised by persistence, replicability, and invisible audiences, "networked publics [such as those engaging in SNSs] add an additional feature - *searchability* - while magnifying all of the other properties" (boyd, pp. 126-127, emphasis in original). This creates the opportunity for networking to occur, but it also makes communication hypervisible, with potentially profound consequences. In this context, managing one's public profile becomes a vital skill and this is one area where education can play an important role. As boyd argues, "they [Generation Y] are learning to navigate networked publics; it is in our better interest to figure out how to help them" (2008, p. 139; Burgess, 2006). To do so first requires an understanding of both the opportunities that Web 2.0 technologies provide, and an understanding of the ways in which Generation Y uses these technologies.

Generation Y and education: Changing roles?

According to Thompson (2007), "Web 2.0 is a potentially disruptive technology because of its potential to change the model of higher education from the traditional classroom framework to an asynchronous 24/7 mode" (para. 17). But he argues that "coping with this disruptive force could mean engaging students in extended collaborative learning opportunities" (para. 17). The focus on collaborative learning is no coincidence as collaboration in a broad sense is probably the single most important opportunity that Web 2.0 technologies offer, and this coincides with the currently dominant pedagogical paradigm of social constructivism, "which - unlike the transmission of knowledge model - assumes that students must become active partners in the construction of knowledge with their peers, academic staff, and the wider social context of the disciplines in which they work" (Burgess, 2006, p. 105). Web 2.0 technologies are perfectly suited to this pedagogical paradigm, and can actually enhance its applicability. As Mejias (2006) notes, "social software allows students to participate in distributed research communities that extend spatially beyond their classroom and school, temporally beyond a particular class section or term, and technologically beyond tools and resources that the school makes available to students" (para. 1). In other words, social software potentially removes a number of boundaries that have hitherto characterised higher education, and this is an important aspect of the disruption to which Thompson refers. It removes layers of control, both spatial and temporal

control. Within this context, students do not necessarily need to be in an on-campus classroom, but can be part of a particular learning community whenever it suits them, provided they have access to the Web. The temporal dimension also provides opportunities for learning that transcend the traditional semester segmentation, potentially "creating more authentic engagement for lifelong learners" (Olcott, 2008, personal communication, January 22). The opening up of time and spaces for learning also means that it can be made more directly relevant to individual students' wider contexts, for example through work-based learning, for as Keenge, Onchwari, and Wachira (2008) state, "the most important element of meaningful learning is not so much in how information is presented, but how new information is integrated into an existing knowledge base" (p. 85). The other disruptive element here is that it changes the role of the teacher from a 'disseminator of knowledge' to a 'facilitator of learning' (Bruns, Cobcroft, Smith, & Towers, 2007; Kehrwald, 2005).

With specific reference to Web 2.0 technologies, De Byl and Taylor (2007, p. 123) identify three broad educational opportunities that are all linked to the abovementioned spatial and temporal dimensions: (1) they can allow students to take control of their own learning; (2) they can provide students with authentic learning activities and spaces; and (3) they can stimulate learning conversations and collaborative learning. Indeed, Web 2.0 tools themselves can play an important role, "as they are already configured to allow input and collaborative content cocreation from a large number of participants without necessarily imposing any one fixed hierarchical structure on the process" (Bruns et al., 2007, p. 329). This hierarchical structure refers again to the traditional roles of educator and student, and again we can see the potentially disruptive effects of this, since it can be seen as a radical reconfiguration of these roles, and hence requires educators to relinquish a certain amount of control over the learning process.

Educators often see new technologies as threatening their scholarly authority, precisely because these technologies require a re-thinking of roles, but this threat only materialises if we stay locked in a binary framework of 'educator versus student'. The concept of co-creation by contrast allows us to think about the educational context as a space where educators and students are both implicated in a community of co-creators. This applies especially to Web 2.0 technologies as both students and teachers potentially bring different skills to the table, and are thus joined in a collaborative learning journey. This does not mean, however, that there is no differentiation at all, nor does it mean that this hierarchical flattening works on all levels, thereby effectively making the role of the teacher obsolete. It means instead that teachers need to be more specific in how they apply their knowledge, and more open to seeing themselves as co-learners, rather than purely as conveyors of knowledge. Burgess (2006), in discussing educational applications of blogs, argues, for example, that the approach taken to the Weblog tasks in her courses "emphasised the social, networked nature of knowledge construction and sharing, rather than the production of particular kinds of written texts" (p. 109). An important aspect of her argument is that in the context of Web 2.0 technologies, educators need to prepare students to be effective *public* communicators, appropriate to the new media contexts in which they are already immersed. In this light, it is appropriate to question the ongoing validity of the academic essay, which is usually written for one 'audience member' (the educator) rather than potentially for everyone. The concept of co-creation recognises radical changes in the production and dissemination of knowledge, where the boundaries between creators and recipients of knowledge have blurred significantly. Moreover, the Web 2.0 context and its associated communication modes are still in development, which levels the playing field in that it makes the traditional practice of a educator

telling a student how to communicate appropriately inappropriate. Rather, students and educators collaboratively develop appropriate communication modes in this public space, or new types of literacies (Wilber, 2007). Bruns talks in this respect of 'produsers': "users of collaborative environments who engage with content interchangeably in consumptive *and* productive modes (and often in both virtually at the same time): they carry out produsage'' (2006, p. 6, emphasis in original). This thus erases the boundary between educators and students, and makes them both 'produsers'.

If we accept that Web 2.0 technologies are blurring the lines between educators and students, and that both become co-creators and 'produsers' of knowledge, we are still faced with a major dilemma in terms of assigning value. In other words, what constitutes 'worthwhile' knowledge in this context? And what constitutes meaningful learning? As Barnes, Marateo, and Pixy Ferris (2007) note, "the dilemma arises from pedagogical strategies that effectively conflate knowledge with mere information management while failing to tap into the positive potential of the Net Geners' orientation towards learning" (para. 10). Farmer (2006) expresses a similar concern in his discussion of educational blogging: "blogs undoubtedly support sustained discourse, but a question asked by many engaging with the technology is the extent to which this discourse is reflective, critical and purposeful" (p. 96). This goes to the heart of how educators define the role and responsibilities of educators in a Web 2.0 context, which in the final analysis becomes an ethical question, because it needs to be finely attuned to not only what students are attracted to in this context, but also what they need to learn. Arguably the most important skills are the ability to express oneself appropriately and the ability to differentiate between different modes of communication, to make appropriate judgements about available information, and the ability to find relevant information. As Zimmerman and Trekles-Milligan (2007) argue,

Students must develop critical thinking skills and literacy in online communication, since those who possess well-developed communication skills across platforms, along with problem-solving skills and technological capability, will be the ones who excel in today's digital world – and tomorrow's. It is our task as educators to help our students gain those skills. (para. 10)

It is important to remember that while much of this can be taught in a co-creative manner, there is still a need to set particular boundaries.

Beyond Generation Y: Is that all there is?

What has been discussed so far is based on the premise that 'students today' belong to Generation Y. Much has been written about what is variously called Generation Y, the Net Generation (Oblinger & Oblinger, 2005), Millennials (Sankey, 2006) and Digital Natives (Prensky, 2001). Much of this writing, however, has a high 'hype factor', in that it presumes a radical break with the past. Prensky, for example, argues that "our students have changed radically. Today's students are no longer the people our educational system was designed to teach" (para. 1). He claims that "today's students think and process information fundamentally differently from their predecessors" (2001, para. 4). This sets up the earlier mentioned binary between students (digital natives) and teachers (digital immigrants). Ultimately, this then leads to his central question: "should the Digital Native students learn the old ways, or should their Digital Immigrant educators learn the new?" (Prensky, para. 17). While this is clearly a deliberately provocative question, it has the unhelpful side effect of reinforcing an either/or binary, by

simplifying both the category of 'student' and 'educator', thereby ignoring not only an increasingly diverse student population but also closing the door on the possibility that skills associated with Digital Natives could be acquired at a later stage, or at least appropriated in different, yet meaningful ways (Huijser, 2006).

Prensky's argument is largely positional in nature and not based on specific empirical research. More recently, however, such empirical research is beginning to appear which cuts through some of the hype associated with Generation Y (Kvavik, 2005; Kennedy, Judd, Churchward, Gray, & Krause, 2008). While these studies confirm that Generation Y has grown up in an environment 'saturated' by technology, they also suggest that there is much variation in terms of types of use, associated skills, and importantly for our purposes here, preferences for use in education. A recent Australian study by Kennedy et al. (p. 108) shows that "many first year students are highly tech-savvy. However, when one moves beyond entrenched technologies and tools (e.g., computers, mobile phones, email), the patterns of access and use of a range of other technologies show considerable variation." For example, while Kennedy et al. found a significant growth in students' general use of instant messaging, blogs and podcasting, they also found that the majority of students rarely or never used these technologies for study, and importantly, "the transfer from a social or entertainment technology to a learning technology is neither automatic nor guaranteed" (Kennedy et al., p. 119). This is particularly significant in relation to SNSs, as these constitute a social network of peers, but one in which the primary audience consists of peers that they know offline (boyd, 2007). In terms of educational applications, this has significant implications for rural or regional universities with geographically dispersed student populations, many of whom study in distance mode and therefore do not know each other offline. Hargittai (2007) found in her study of American college students' use of SNSs that distance students were least likely to use for example Facebook; "it is precisely the students for whom use of such sites may make the most difference who are missing out" (Discussion section, para. 5). Another issue here is that SNSs, while public to some extent, in many cases literally constitute MySpace, not YourSpace. If we were to transfer this to an offline space, we could compare it to a mall where students hang out. Now imagine what would happen if we, as educators, were to 'invade' this space for educational purposes. More research is therefore needed "to determine the specific circumstances under which students would like their 'living technologies' to be adapted as 'learning technologies" (Kennedy et al., p. 119).

Hargittai's (2007) study focused specifically on SNSs and questions of use and access. The main findings suggest that there are wide variations in terms of adoption and participation. Not only is the adoption of these technologies nowhere near universal, there are also offline social factors, such as gender, race and especially educational background, that influence the type of use, and also the specific SNSs different groups primarily engage with. Hargittai concludes that,

The membership of certain online communities mirrors people's social networks in their everyday lives; thus online actions and interactions cannot be seen as *tabula rasa* activities, independent of existing offline identities. Rather, constraints on one's everyday life are reflected in online behaviour, thereby limiting- for some more than others- the extent to which students from different backgrounds may interact with students not like themselves. (Conclusion section, para. 5)

This raises significant questions in light of the earlier developed arguments about co-creation and social networking, and their importance in providing meaningful

learning experiences, characterised by co-construction of knowledge, collaboration and reflection (Jonassen, Howland, Moore, & Marra, 2003). Furthermore, all of these studies specifically focus on Generation Y, which in most definitions stops at the age of 30 (Oblinger & Oblinger, 2005). While this may be the dominant student cohort in most traditional 'sandstone' universities (Kennedy et al., 2008), many regional universities may have a much more diverse student cohort, in terms of ages, educational backgrounds, geographical locations and modes of study (Sankey, 2006). The diversity that these studies identify *within* Generation Y could therefore be amplified manyfold outside of Generation Y.

Conclusion

While Web 2.0 technologies offer many exciting opportunities for potential educational applications, in the form of blogs, wikis and other social networking applications, and while these should therefore be explored, such applications should be carefully considered in terms of objectives and projected learning outcomes. As Olcott (2008, personal communication, January 22) notes, "adoption of social software is not synonymous with the effective delivery and assessment of quality teaching and learning." The central challenge for educators and university administrators then becomes "how to cater for the broad range in students' levels of access to, familiarity with, and preference for different technologies and technology-based tools" (Kennedy et al., 2008, p. 118). To confront this challenge requires experimentation with educational applications of Web 2.0 technology based on sound pedagogical principles, in combination with research and thorough evaluation of such applications. While Generation Y is certainly not a uniform group and while it does not represent the entire student population, this is no reason to ignore Web 2.0 technologies, for ignoring them not only risks becoming irrelevant to Generation Y, but is also walking away from education's role and responsibility in shaping a meaningful and relevant future for those seeking to develop themselves in an increasingly networked world. In Wilber's (2007) words, "universities have developed reputations for distancing themselves from the everyday. Yet our students must be able to connect what they learn in their courses to the experiences they have outside them, or deep, meaningful learning will never occur" (para. 24). If these experiences include Web 2.0 technologies, it is up to us, as educators, to exploit their educational opportunities, to avoid unwelcome imposition, and hence to create meaningful learning experiences for Generations A through to Z.

References

- Barnes, K., Marateo, R. C., & Pixy Ferris, S. (2007). Teaching and learning with the Net Generation. *Innovate*, *3*(4). Retrieved December 11, 2007, from http://www.innovateonline.info/index.php?view=article&id=382
- Batson, T. (2008, January 16). A new social context for information. *Campus Technology*. Retrieved January 18, 2008, from http://www.campustechnology.com/article.aspx?id=57281
- boyd, d. (2008). Why youth (heart) social network sites: The role of networked publics in teenage social life. In D. Buckingham (Ed.), *Youth, identity, and digital media* (pp. 119–142). Cambridge, MA: MIT Press.
- boyd, d. m., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1). Retrieved January 11, 2008, from http://jcmc.indiana.edu/vol13/issue1/boyd.ellison.html
- Bruns, A., & Jacobs, J. (2006). Introduction. In A. Bruns & J. Jacobs (Eds.), *Uses* of blogs (pp. 1–8). New York: Peter Lang.

- Bruns, A., Cobcroft, R., Smith, J., & Towers, S. (2007). Mobile learning technologies and the move towards 'user-led education'. In conference proceedings *Mobile Media 2007*. (Sydney, July 2–4, 2007, pp. 326–334). Sydney, Australia: University of Sydney.
- Burgess, J. (2006). Blogging to learn, learning to blog. In A. Bruns & J. Jacobs (Eds.), *Uses of blogs* (pp. 105–114). New York: Peter Lang.
- De Byl, P., & Taylor, J. (2007). A Web 2.0/Web3D hybrid platform for engaging students in e-learning environments. *Turkish Online Journal of Distance Education*, 8(3), 108–127.
- Downes, S. (2007). Places to go: Facebook. *Innovate*, 2(5). Retrieved December 11, 2007, from

http://www.innovateonline.info/index.php?view=article&id=517

- Dreyfus, H. L. (2001). On the Internet. London & New York: Routledge.
- Farmer, J. (2006). Blogging to basics: How blogs are bringing online education back from the brink. In A. Bruns & J. Jacobs (Eds.), Uses of blogs (pp. 91– 103). New York: Peter Lang.
- Frean, A. (2008, January 14). White bread for young minds, says university professor. *TimesOnline*. Retrieved January 18, 2008, from http://technology.timesonline.co.uk/tol/news/tech_and_web/the_web/article31 82091/
- Goodall, H. (2008, January 17). Tech ignorance keeps teens from changing the world. *The chronicle of higher education: The wired campus*. Retrieved January 18, 2008, from
- http://chronicle.com/wiredcampus/index.php?id=2676&utm_source=wc/ Hargittai, E. (2007). Whose space? Differences among users and non-users of
- social network sites. *Journal of Computer-Mediated Communication*, 13(1). Retrieved January 11, 2008, from

http://jcmc.indiana.edu/vol13/issue1/hargittai.html

- Huijser, H. (2006). Refocusing multiliteracies for the net generation. *International Journal of Pedagogies and Learning*, 2(1), 21–33.
- Jonassen, D. H., Howland, J., Moore, J., & Marra, R. M. (2003). *Learning to solve* problems with technology: A constructivist approach (2nd ed.). UpperSaddle River, NJ: Prentice Hall.
- Keengwe, J., Onchwari, G., & Wachira, P. (2008). The use of computer tools to support meaningful learning. *AACE Journal*, *16*(1), 77–92.
- Kehrwald, B. (2005). Learner support in networked learning communities: Opportunities and challenges. In J. B. Son & S. O'Neill (Eds.), *Enhancing learning and teaching: Pedagogy, technology and language* (pp. 133–148). Flaxton, QLD: Post Pressed.
- Kennedy, G. E., Judd, T. S., Churchward, A., Gray, K., & Krause, K. (2008). First year students' experiences with technology: Are they really digital natives? *Australasian Journal of Educational Technology*, 24(1), 108–122.
- Kvavik, R. B. (2005). Convenience, communications, and control: How students use technology. In D. Oblinger & J. Oblinger (Eds.), *Educating the net generation* (pp. 7.1–7.20). Boulder, CO: Educause. Retrieved August 15, 2008, from http://www.educause.edu/educatingthenetgen/

Leslie, S., & Landon, B. (2008). Social software for learning: What is it, why use

it? London: The Observatory on Borderless Higher Education (OBHE). Retrieved May 11, 2008, from http://www.obhe.ac.uk/products/reports/

Mejias, U. (2006). Teaching social software with social software. *Innovate*, 2(5). Retrieved December 11, 2007, from http://www.innovateonline.info/index.php?view=article&id=260

Oblinger, D., & Oblinger, J. (2005). Is it age or IT: First steps toward understanding the net generation. In D. Oblinger & J. Oblinger (Eds.), *Educating the net generation* (pp.2.1–2.20). Boulder, CO: Educause. Retrieved August 15, 2008, from http://www.educause.edu/educatingthenetgen/

Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5). Retrieved February 14, 2007, from http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives%20Digital%20Immigrants%20-%20Part1.pdf

Sankey, M.D. (2006). A neomillennial learning approach: Helping non-traditional learners study at a distance. *International Journal of Education and Development using ICT*, 2(4), 82–99.

Thompson, J. (2007). Is education 1.0 ready for Web 2.0 students? *Innovate*, *3*(4). Retrieved December 11, 2007, from

http://www.innovateonline.info/index.php?view=article&id=393
Wilber, D. J. (2007). MyLiteracies: Understanding the net generation through LiveJournals and literacy practices. *Innovate*, 3(4). Retrieved December 11, 2007, from http://www.innovateonline.info/index.php?view=article&id=384

Zimmerman, L., & Trekles-Milligan, A. (2007). Perspectives on communicating with the net generation. *Innovate*, 4(2). Retrieved December 11, 2007, from http://www.innovateonline.info/index.php?view=article&id=338