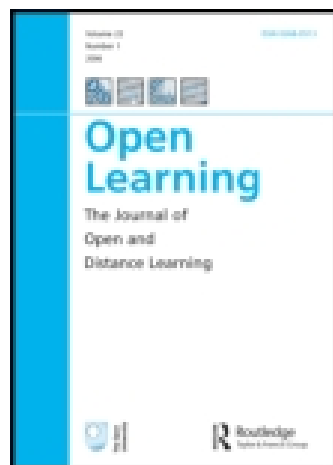


This article was downloaded by: [University of Sydney]

On: 04 May 2015, At: 10:40

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Open Learning: The Journal of Open, Distance and e-Learning

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/copl20>

### Ethical issues in online education

Bill Anderson<sup>a</sup> & Mary Simpson<sup>a</sup>

<sup>a</sup> Massey University, New Zealand

Published online: 05 Jun 2008.

To cite this article: Bill Anderson & Mary Simpson (2007) Ethical issues in online education, Open Learning: The Journal of Open, Distance and e-Learning, 22:2, 129-138, DOI:

[10.1080/02680510701306673](http://dx.doi.org/10.1080/02680510701306673)

To link to this article: <http://dx.doi.org/10.1080/02680510701306673>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

# Ethical issues in online education

Bill Anderson\* and Mary Simpson

Massey University, New Zealand

Teaching at a distance raises ethical issues particular to the distance context. When distance teaching is also online teaching, the situation is even more complex. Online teaching environments amplify the ethical issues faced by instructors and students. Online sites support complex discourses and multiple relationships; they cross physical, cultural and linguistic boundaries. Data of various kinds are automatically recorded in a relatively permanent form. In a discussion of the practices and welfare of staff and students, we highlight ethical issues related to matters of equity and diversity, surveillance and consent, identity and confidentiality. Rather than attempt to resolve issues raised in this discussion, we pose questions to encourage exploration of those issues.

**Keywords:** *Ethics; Online courses; Tutoring; Virtual classrooms; Web-based instruction*

## Introduction

In engaging with questions of values and the resolution of practical moral problems, applied ethics demands consideration of both ethical principles and cases of right action. Beauchamp (2003, p. 10) expresses this concisely in saying ‘Principles need to be made specific for cases, and case analysis needs illumination from general principles’. Applied ethics provides a framework for a disciplined approach to engaging with issues often faced by distance educators, with its focus on the need to respond to and engage with moral issues (Beauchamp, 2003), controversial issues (Fox & DeMarco, 1986) and issues of power (Jennings, 1986). In this article we discuss issues such as those relating to equity and diversity, surveillance and consent, and identity and confidentiality. These issues have not been well explored in relation to online teaching. We adopt Kidder’s (1995) advice to resolve our ethical concerns through energetic self-reflection. Our intent is not to provide solutions, but to raise additional questions for shaping responses to the ethical issues we discuss.

---

\*Corresponding author. School of Curriculum and Pedagogy, College of Education, Massey University, Palmerston North, New Zealand. Email: w.g.anderson@massey.ac.nz

Brey (2006) suggests four major areas of social and ethical concerns regarding online learning and teaching. He depicts these areas as questions:

Can social, cultural and academic values be successfully transmitted in computer-mediated education? ... Are computer-mediated educational settings conducive to academic freedom or do they threaten to undermine it? ... Does a reliance on computer networks in higher education foster equality and equity for students and does it promote diversity, or does it disadvantage certain social classes and force conformity? ... What kinds of unethical behaviour by students and staff are made possible in computer-mediated education, and what can be done against it?' (Brey, 2006, p. 91)

Our interests here lie within the third and fourth of Brey's questions because they take us to issues that, with the enthusiastic embrace of online teaching, are seldom discussed. We see the questions as immediately related to the practices and welfare of students and staff in the teaching and learning context, thus bringing us into the field of applied ethics.

In the past 10 years online education has grown phenomenally, and has involved increasing numbers of instructors teaching at a distance for the first time. Although teachers from any mode accept the moral basis of their profession, teaching at a distance raises—perhaps is driven by—the type of ethical issues identified above that are not necessarily encountered by face-to-face teachers. When teaching at a distance is also online, the situation is more complex. Online environments create sites that are 'supportive of hybrid identities, complex discourses, and multiple relations among learners' (Zembylas & Vrasidas, 2005, p. 61). The Internet allows education to cross boundaries and distances—geographical, social, linguistic and cultural—on quite a new scale, creating new challenges for distance educators wherever they are located.

### **Equity and diversity in online education**

Here we discuss three aspects of online education related to the third of Brey's questions: 'Does a reliance on computer networks in higher education foster equality and equity for students and does it promote diversity, or does it disadvantage certain social classes and force conformity?' Our focus is on access to online services and online learning, cultural impacts and power relations.

#### *Access to online education: education for all?*

Wedemeyer's statement that 'Instruction should be available any place where there are students—or even only one student—whether or not there are teachers at the same place at the same time' (1981, p. 36) highlights a moral aspect of distance education; namely, equality of access for all. Is this goal still important to distance educators, or has the moral imperative that was behind Wedemeyer's statement been diminished over time? Online education, relying as it does on access to online services, is a form of distance education to which access is limited. This point is made repeatedly in the collection of international case studies reported in Carr-Chelman (2005). For example, Simpson (2005, p. 93) argues that 'there is as yet very little evidence to support the contention that e-learning will help overcome social exclusion

or widen participation' in education; Anderson (2005, p. 177) concludes that 'those who are traditionally disadvantaged in our system of education face the same disadvantage when confronted with the online world'; and Mackintosh (2005), writing about sub-Saharan Africa, notes the relative absence of information and communications technology (ICT) infrastructure while acknowledging the potential of digital ICTs to support developments in education in this region.

Two recent projects highlight the complexities of access issues, especially in relation to online services. Crump and McIlroy (2003) completed a study concerning the use of a free-of-charge community computing facility in a lower socio-economic area in Wellington, New Zealand. After surveying non-users, the authors concluded that the digital divide would not be addressed through universal physical access to computer technology, writing that 'interest in accessing computing, even when situated in a convenient social space, and offered at no charge, is unlikely to be seen as a priority for daily living' (Crump & McIlroy, 2003). A similar tale is told in the Final Report of the Wired Up Communities (WUC) project that occurred in the United Kingdom from 2000 to 2002 (Devins *et al.*, 2003). One aim of WUC was 'to provide ICT to enable home access to the Internet and to overcome barriers to use of the Internet' (p. ii). The WUC project was only partially successful. A final survey found that in homes where technology was provided free of charge, 25% of participants did not bother to use it, citing lack of interest or lack of time.

Intent to learn might take users beyond the 'lack of interest', 'not a priority' rationale for non-use. Subsequent to the WUC report, a project entitled 'Overcoming social exclusion through online learning', funded by the UK Government, sought to examine the potential of online learning to overcome social exclusion and identify the factors that influence participation, drop out and successful completion in online learning, especially in relation to learners who are socially or economically disadvantaged (see <http://www.niace.org.uk/online/index.asp>). The draft final report (Arkate *et al.*, 2006) suggests that while access to online services continues to limit the potential of online learning for learners who are socially and economically disadvantaged, 'online learning can provide innovative and powerful bridges between the educational disadvantage and social inclusion' (p. 102). However, it notes that building such bridges is not straightforward.

What these projects reveal is that considerable work is required to ensure that the advantages of online learning reach everyone. Earlier generations of distance education utilised technologies with nearly universal access; currently the technology of online learning serves as a barrier for some communities.

### *Cultural impacts*

Exploration of issues of culture in the distance education literature is quite thorough (thus our discussion here is not extensive). We note major themes and then draw attention to a view of culture particularly relevant in online education. Our premise is that online courses aiming for cross-cultural participation must be designed and facilitated in ways that enhance culturally inclusive learning (McLoughlin, 1999).

The work of Gunawardena *et al.* (2003) takes the exploration of cultural issues into the online environment, drawing attention again to the issues that distance educators face when working in multicultural situations. Collis and Remmers (1997) note the importance of recognising cultural differences in relation to communication and interaction, language, content and representational form. Cultural issues can be summarised as being related to two major themes: the development of inequities arising from 'dominant' cultural values embodied in teaching materials and methods (see, for example, Boshier *et al.*, 1999; Pincas, 2001); and the potential for miscommunication among participants in online discussions, arising from cultural difference (Goodfellow & Hewling, 2005). Ethical practice for online educators would demand scrupulous consideration of the issues arising from these two broad themes. The former has been particularly well addressed in the literature, as have aspects of the latter. Questions remain, however.

Goodfellow and Hewling's (2005) work suggests that the themes of cultural inequities and miscommunication arise from an 'essentialist' view of culture, a view that, in relation to online environments, has limitations. Culture, they suggest, is 'something that is produced out of interactions in ... [online environments] ... rather than being brought to them by individual participants' (Goodfellow & Hewling, 2005, p. 356). Viewing culture as dispositions brought to the online class is 'too simplistic a view to adequately account for the perceptions and behaviour of individuals in online classrooms' (Goodfellow & Hewling, 2005, p. 364). While not denying the impact of the essentialist view of culture, they draw attention to the pedagogical culture of online participation, its negotiated nature and the impacts of that culture, even outside the virtual classroom.

This negotiated view of online culture raises additional complex issues for distance educators, including the question, 'To what extent should discussion about the merits of online interaction also take into account the impact of that interaction beyond the course?' Al-Saggaf (2004) highlighted this issue in a study that investigated how online communities in Saudi Arabia are affecting people's offline behaviour. He describes (potentially) culturally inappropriate changes in offline behaviour that he ascribes to participation in online communities. Despite his conclusion that the positive outcomes for his participants outweighed the negative ones, Al-Saggaf's study raises the issue of the wider impacts of participation and the responsibilities of educators regarding behaviours. Through online discussions, online education can bring a greater range of perspectives and ideas to dispersed students, and opportunities to engage with the people who hold them. Education brings change, and educators know this. How do educators weigh their responsibilities in this regard?

### *Power*

The existence of power relations between instructors and student and between students themselves in face-to-face educational contexts is widely acknowledged. Such relations distort educational opportunities for students, ensuring differential outcomes that reinforce social hierarchies. Here we highlight the presence of such

power relations in online educational contexts and point to questions and potential responses for instructors.

Early depictions of the computer-mediated communication (CMC) world saw it as one where freedom, diversity and equality were the natural order (for example, Rheingold, 1993). Comparatively recent portrayals of the CMC environment in distance education depict discussion as open and democratic (for example, Tuckey, 1993; Rohfeld & Hiemstra, 1995). Online education does afford such possibilities. However, there is increasing evidence that, even in education, power relations such as those formed in face-to-face classes are also enacted as part of the online environment (see, for example, Lockard, 2000; Yates, 2001; McGee & Briscoe, 2003; Anderson, 2006), and that the moral issues teachers face as they work with their students are the same as those met in the face-to-face classroom (Buzzelli & Johnston, 2002).

The role of teaching ascribes authority to one (or more) members of the class. Garrison (2003) argues strongly that the teacher has special control and responsibility concerns, among them the responsibility for 'establishing the balance of control that will ensure worthwhile outcomes and continuing efforts to learn' (p. 165). For teachers, a primary concern is that when power relations between students develop or are re-enacted in (online or offline) classrooms, access to educational opportunity is unequally distributed among class members.

The effects of hierarchical power relations can be reduced by appropriate social organisation of a CMC system (Collins-Jarvis, 1993; Silver, 2000) and teachers can work online to minimise the effect of power relations in courses (Sujo de Montes *et al.*, 2002). The question is, to what extent do educators recognise the impact of power in online courses and how much are they prepared or able to work through an ethical responsibility to maximise learning opportunities for all students in the class?

Another aspect of online education, linked to the power of institutions in relation to students, concerns the requirement of participation in online discussion. In our institution the literature-based argument for the creation of participatory learning communities in online courses has been cemented in various strategy and policy papers. Thus, many online courses require participation in online discussion; the requirement is part of the pedagogical culture of Massey University. Our institution is not alone. A participatory requirement is an international phenomenon, as any review of courses on the Web illustrates. Our own extensive experience shows there is certainly value in online discussion, but is there value in requiring it? (How) do we respect the right of students to study independently and engage in discussion when they want to? Is it right to demand that all students post (a certain number of) messages in order to gain marks for the course? How do we allow for differences in students while acknowledging that, as individuals, they may (or may not) choose to participate?

### **Students and staff—teaching and learning online**

Now we move to Brey's fourth question, related to the affordances, particularly those associated with the permanence of text, which online education provides for unethical



behaviours by students and staff. Central to this section of our discussion is the consideration of rights students have regarding privacy, informed consent and use of their work. We consider ways in which online teaching environments introduce new, or exacerbate existing, ethical questions faced by students and instructors as they interact.

### *Surveillance*

Surveillance of students is an issue in all online courses. We are able to track our students' participation, what they read, when they read it and the number of responses they post. We have a permanent record: students' postings are there for us to peruse and to print off. Such records are often used to give us information about a student's performance. Lyon (2001) noted that two metaphors dominate discussion of surveillance—the idea of Big Brother (from George Orwell's novel *Nineteen-eighty-four*) and Bentham's vision of the Panopticon where ongoing surveillance becomes accepted and almost invisible. We suggest that the first metaphor is untenable in education—apart from any other factor, no teacher has the time to assume full and total control over the actions of learners. Bentham's metaphor is more potent, however. Surveillance is hidden, and concern and action on the part of those being watched is driven by uncertainty.

How can we assess the kind of surveillance that occurs in online courses and make ethical judgements about the use of such data? For used it will be. For these circumstances, Marx (1998) went beyond concerns with privacy and data protection to develop four guiding principles derived from the dignity of the person and the 'value of trust and its implications for community' (p. 183). Those four principles—not causing harm, fairness of treatment, meaningful choices for data subjects, and the avoidance of coercion and manipulation—must clearly be borne in mind as instructors consider potential uses for the data collected.

The large amount of data about students being collected in most learning management systems is usually collected automatically. Lecturers or tutors do not typically make active decisions to collect information about how often or when students are online, reading or posting messages, or working through course content in a particular order. Messages themselves remain as data. The usual safeguards offered to students are guarantees of privacy and of data protection. But, while important, are these safeguards addressing the right issue when an even more fundamental issue, informed consent for data gathering, is overlooked? It is possible that some students are not aware that data about their actions are being recorded. How often do instructors pause to think about whether that recording requires informed consent or at least awareness on the part of the student of the nature and extent of the data gathering? The question of safeguards highlights the possibilities for control, and of judgements about students on the basis of the collected data. Privacy and data protection safeguards do nothing to protect against those aspects of surveillance.

### *Consent*

An online learning environment provides greater opportunities to know about our students and to have much of that knowledge recorded permanently for us. We work with Massey students who interact online throughout the course of their qualifications. After a time, their online environment becomes the norm; they forget that they can and may be observed.

Informed consent and being able to control the use of personal information is certainly an individual's right. When students enrol at our institution, Massey University, permission is sought, as part of the application process, to gather and use personal data to provide the institution with quantitative information about the nature of the student group. This information-gathering process at Massey is open and informed. However, information is also gathered in other ways; for example, as we interact as instructors with our students, we build up more personal and specific knowledge. At what point does our interest in knowing more about a student—in order to make meaningful links to learning—intrude on the student's right to privacy? Do we need to ask for permission to watch students' online interactions, to review and reassess their online contributions and to 'eavesdrop' on their 'conversations'?

### *Identity, confidentiality and anonymity*

In online classes students gradually establish a presence and identity through interaction, becoming known in some way to other members of the class. In fact, Joinson (2001, p. 188) has shown 'people disclose more information about themselves during CMC [computer mediated communication] compared to FtF [face to face]'. Entering a new course, students bring with them sets of expectations. When the course anticipates or requires interaction with other students, they might realistically expect that only basic information such as their name is provided to other class members, expect that interactions will be constructive and primarily course-focused, expect that students will work together when required, and expect that class discussions are for the class, not for a general audience. Over time, often reflecting practices set by the instructor and beliefs about the nature of teaching and learning, students come to know each other's online persona, beliefs and ideals. At times students reveal other contact information to enable ongoing interaction. The trust that underpins the free exchange of ideas and the flourishing of debate ensures this.

Personal details are inevitably recorded—in reasonably permanent text. Instructors and students, in our experience, value the permanent text created. Both comment on how textual permanence allows them to return to postings and to reflect on material (Anderson & Simpson, 2004). Textual permanence also threatens. A precise record of discussion can provoke intense responses as students manufacture and magnify slights. Through our own online teaching we are aware of situations where the text-based record coupled with the knowledge of the name of the author (and often other contact details) has led to engagement sometimes amounting to harassment through private mail or email or telephone calls. Textual permanence also



affords the opportunity to easily break the confidentiality of the online classroom, to distribute easily and widely exact copies of messages.

Anonymity potentially offers protection from breaches of confidentiality, and most web-based learning management systems allow for anonymous postings—usually as an instructor-controlled setting. Posting anonymously can have value. However, allowing anonymous posts also affords the possibility of direct and potentially unidentifiable attacks on other students—rare in our experience but something we have witnessed. Such actions raise serious issues for instructors.

Discussion of the three areas—identity, confidentiality, and anonymity—suggests many ethical issues for consideration. Is it an instructor's responsibility to ensure that information provided within a teaching environment is protected? Do we need to provide students with skills, strategies and information specific to online environments? Should we help them in a planned and deliberate way to deal with the types of issues we have raised? The text-based nature of online learning environments raises other questions as well. How long are text-based records of course discussions kept? Do institutions provide any guidelines on this? Where and how should such information be stored? Who should have access to it?

## Conclusion

We began by indicating that teaching students at a distance is no longer the work of a group of committed distance educators; it is now practiced by a large number of tertiary educators. In addition, the nature of the learning experience offered to distance students is changing through the impact of web-based forms of communication. Zembylas and Vrasidas (2005) suggest that it is time for the development of 'ethically responsive online pedagogy' (p. 68). We agree, and commend attention to that development, but also suggest the need for a broader view that looks beyond the pedagogical issues to those linked to instructor and student behaviour, and institutional practice.

Our discussion of aspects of online learning and teaching—equity and diversity; staff–student relationships and interaction—related to the practices and welfare of students and staff has raised many questions. Is universal access to education an imperative for online educators? Should you require participation? How responsible are educators for changes beyond the bounds of the course? (To what extent) should you use data, automatically collected and archived, about student engagement? Should you ask for permission to use it? What threats to identity and confidentiality exist in online courses, and what threats are posed by use of anonymity? Readers' own situations will provide other questions demanding attention. The online contexts in which we work, and the interplay of instructor and student rights, engender a range of ethical issues with which we must all engage.

## References

- Al-Saggaf, Y. (2004) The effect of online community on offline community in Saudi Arabia, *The Electronic Journal on Information Systems in Developing Countries*, 16(2), 1–16.

- Anderson, B. (2005) New Zealand: is online education a highway to the future?, in: A. A. Carr-Chelman (Ed.) *Global perspectives on e-learning: rhetoric and reality* (Thousand Oaks, CA, Sage).
- Anderson, B. (2006) Writing power into online discussion, *Computers and Composition*, 23(1), 108–124.
- Anderson, B. & Simpson, M. (2004) Learning and affective support in small group and class contexts, *International Review of Research in Open and Distance Learning*, 5(3). Available online at: <http://www.irrodl.org/index.php/irrodl/article/view/208/291> (accessed 28 December 2006).
- Arkate, M., Clarke, A., Englebright, L., Essom, J. & Knightley, W. (2006) *Overcoming social exclusion through online learning*. Draft Final Report 2006 (Reference No. RG/1/010024091) (Leicester, National Institute of Adult Continuing Education). Available online at: <http://niace.org.uk> (accessed 20 December 2006).
- Beauchamp, T. L. (2003) The nature of applied ethics, in: R. G. Frey & C. H. Wellman (Eds) *A companion to applied ethics* (Malden, MA, Blackwell).
- Boshier, R., Wilson, M. & Qayyum, A. (1999) Lifelong education and the world wide web: American hegemony or diverse utopia?, *International Journal of Lifelong Education*, 18(4), 275–285.
- Brey, P. (2006) Social and ethical dimensions of computer-mediated education, *Journal of Information, Communication and Ethics in Society*, 4(2), 91–101.
- Buzzelli, C. A., & Johnston, B. (2002) *The moral dimensions of teaching: language, power, and culture in classroom interaction* (New York, RoutledgeFalmer).
- Carr-Chelman, A. A. (Ed.) (2005) *Global perspectives on e-learning: rhetoric and reality* (Thousand Oaks, CA, Sage).
- Collins-Jarvis, L. A. (1993) Gender representation in an electronic city hall: female adoption of Santa Monica's PEN System, *Journal of Broadcasting and Electronic Media*, 37(1), 47–66.
- Collis, B. & Remmers, E. (1997) The world wide web in education: issues related to cross-cultural communication and interaction, in: B. Khan (Ed.) *Web-based instruction* (Englewood Cliffs, NJ, Educational Technology Publications).
- Crump, B. & McIlroy, A. (2003) The digital divide: why the 'don't-want-tos' won't compute: lessons from a New Zealand ICT Project, *First Monday*, 8(12). Available online at: [http://firstmonday.org/issues/issue8\\_12/crump/index.html](http://firstmonday.org/issues/issue8_12/crump/index.html) (accessed 28 December 2006).
- Devins, D., Darlow, A., Petrie, A. & Burden, T. (2003) *Connecting communities to the internet: evaluation of the Wired up Communities Programme (2000–2002)* (London, Department for Employment and Skills). Available online at: from <http://www.dfes.gov.uk/research/data/uploadfiles/RR389.pdf> (accessed 18 December 2006).
- Fox, R. M. & DeMarco, J. P. (1986) The challenge of applied ethics, in: J. P. DeMarco & R. M. Fox (Eds) *New directions in ethics: the challenge of applied ethics* (London, Routledge & Kegan Paul).
- Garrison, D. R. (2003) Self directed learning and distance education, in: M. G. Moore & W. G. Anderson (Eds) *Handbook of distance education* (Mahwah, NJ, Lawrence Erlbaum Associates).
- Goodfellow, R. & Hewling, A. (2005) Reconceptualising culture in virtual learning environments: from an 'essentialist' to a 'negotiated' perspective, *E-Learning*, 2(4), 355–367. Available online at: [http://www.worlds.co.uk/pdf/viewpdf.asp?j=elea&vol=2&issue=4&year=2005&article=5\\_Goodfellow\\_ELEA\\_2\\_4\\_web&id=130.123.128.117](http://www.worlds.co.uk/pdf/viewpdf.asp?j=elea&vol=2&issue=4&year=2005&article=5_Goodfellow_ELEA_2_4_web&id=130.123.128.117) (accessed 31 May 2006).
- Gunawardena, C. A., Wilson, P. L. & Nolla, A. C. (2003) Culture and online education, in: M. G. Moore & W. G. Anderson (Eds) *Handbook of distance education* (Mahwah, NJ, Lawrence Erlbaum Associates).
- Jennings, B. (1986) Applied ethics and the vocation of social science, in: J. P. DeMarco & R. M. Fox (Eds) *New directions in ethics: the challenge of applied ethics* (London, Routledge & Kegan Paul).
- Joinson, A. N. (2001) Self-disclosure in computer-mediated communication: the role of self-awareness and visual anonymity, *European Journal of Social Psychology*, 31(2), 177–192.

- Kidder, R. (1995) *How good people make tough choices: resolving the dilemmas of ethical living* (New York, Morrow).
- Lockard, J. (2000) Babel machines and electronic universalism, in: B. E. Kolko, L. Nakamura & G. B. Rodman (Eds) *Race in cyberspace* (New York, Routledge).
- Lyon, D. (2001) Facing the future: seeking ethics for everyday surveillance, *Ethics and Information Technology*, 3(3), 171–180.
- Mackintosh, W. (2005) Can you lead from behind?, in: A. A. Carr-Chelman (Ed.) *Global perspectives on e-learning: rhetoric and reality* (Thousand Oaks, CA, Sage).
- Marx, G. T. (1998) Ethics for the new surveillance, *The Information Society*, 14(3), 171–185.
- McGee, P. & Briscoe, F. (2003) Discourse analysis: power/knowledge on an academic listserv, *Journal of Information, Communication and Ethics in Society*, 1(3), 133–147.
- McLoughlin, C. (1999) Culturally inclusive learning on the web, in: K. Martin, N. Stanley & N. Davison (Eds) *Teaching in the disciplines/learning in context. Proceedings of the 8th annual Teaching and Learning Forum*, University of Western Australia, Perth. Available online at: <http://lsn.curtin.edu.au/tlf/tlf1999/mcloughlin.html> (accessed 23 September 2006).
- Pincas, A. (2001) Culture, cognition and communication in global education, *Distance Education*, 22(2), 30–51.
- Rheingold, H. (1993) *The virtual community: homesteading on the electronic frontier* (Reading, MA, Addison Wesley).
- Rohfeld, R. W. & Hiemstra, R. (1995) Moderating discussions in the electronic classroom, in: Z. L. Berge & M. P. Collins (Eds) *Computer mediated communication and the online classroom* (Cresskill, NJ, Hampton Press).
- Silver, D. (2000) Margins in the wires: looking for race, gender and sexuality in the Blacksburg Electronic Village, in: B. E. Kolko, L. Nakamura & G. B. Rodman (Eds) *Race in cyberspace* (New York, Routledge).
- Simpson, O. (2005) E-learning, democracy and social exclusion, in: A. A. Carr-Chelman (Ed.) *Global perspectives on e-learning: rhetoric and reality* (Thousand Oaks, CA, Sage).
- Sujo de Montes, L. E., Oran, S. M. & Willis, E. M. (2002) Power, language, and identity: voices from an online course, *Computers and Composition*, 19(3), 251–271.
- Tuckey, C. J. (1993) Computer conferencing and the electronic whiteboard in the United Kingdom: a comparative analysis, *The American Journal of Distance Education*, 7(2), 58–72.
- Wedemeyer, C. A. (1981) *Learning at the back door: reflections on non-traditional learning in the lifespan* (Madison, WI, University of Wisconsin).
- Yates, S. J. (2001) Gender, language and CMC for education, *Learning and Instruction*, 11(1), 21–34.
- Zembylas, M. & Vrasidas, C. (2005) Levinas and the ‘inter-face’: the ethical challenge of online education, *Educational Theory*, 55(1), 61–78.