# Diversity, identity and belonging in e-learning communities: some theories and paradoxes

### **Abstract**

It is often assumed that online collaborative learning is inclusive of diversity. In this exploratory paper I challenge this notion by developing a theory which proposes that inclusion occurs through congruence between learners' social identities and the identities implicitly supported through the interactions in a particular community. To build identity congruence, e-learning communities need spaces for both commonality and diversity and I present three paradoxes which underlie the aims of online learners and teachers to embrace diversity online. I illustrate these with some examples from online learning and teaching. The ability to 'listen' to each other online offers a way forward and the paper ends with some future possibilities about how we can ensure that e-learning communities benefit from diversity.

#### Introduction

Learner diversity and inclusion have recently received much attention in Higher Education as part of both widening participation and retention initiatives, but there is always a danger of assuming that learner diversity is well understood. In a paradigm shift away from teacher-led transmission towards collaborative learning and social constructivism where the learner is central, the new emphasis is on group working, professional learning and learning communities. The move has been aided by the growth of sophisticated online tools for facilitation collaborative learning (McConnell, 2006). But, although co-operative and collaborative working and learner empowerment has its roots in feminist pedagogies and adult and community education (Freire, 1972; Lather, 1991), and the flexibility of time and place offered by e-learning is widely assumed to support diversity, there is little evidence to suggest that online learning groups are any more welcoming of diversity than traditional groups. Indeed they may be less so as flexibility provides learners with more opportunities to disengage as well engage. Questions arise such as: "are the issues of diversity and equality online the same as those in conventional learning environments?". There is a pressing need to assess how learner diversity can be encouraged and supported in this more learner-centred culture that is moving online. This paper is an exploratory piece of work that presents emerging theories and troubling paradoxes arising out of both my professional and research work in inclusive online learning.

Learner diversity is frequently used in educational rhetoric but users of the term do not always explore its exact meaning. It could refer to diversity in terms of identification with social categories such as those based on ethnicity, gender, socio-economic status, class, nationality, disability, sexuality, age or religion. Diversity of identity could also relate to differences in educational background, work or professional experience or differences in language and culture. Engagement with different forms of knowledge: scientific, autobiographical, professional, tacit, practical, anecdotal, electronically published as opposed to printed, as well as differences in learning styles and preferences for cognitive or practical skills, could all come under the umbrella of learner diversity. In this paper I am particularly concerned with diversity of social identity, but, as I shall illustrate later, any of the above attributes of diversity could be relevant to the construction of social identity.

An examination of diversity of identity in e-learning groups or communities with its implications for inclusion/exclusion of learners has led me to engage with both theory and paradox. Drawing on theories of how identity is constructed and negotiated in online communities, I develop a concept of identity congruence which enables us to understand how learners are enabled to belong or take part in online groups and communities and how and why some are excluded. Arising from this theory, I identify three paradoxes which underlie efforts to ensure that the groups or communities embrace diversity. I will illustrate these with some examples from online learning and teaching practice. Finally, I will offer some possibilities for imagining ways of resolving these paradoxes that will be of interest to e-learners, e-facilitators and researchers alike.

### Identity, learning and exclusion

Because learning transforms who we are and what we can do, it is an experience of identity. (Wenger, 1998: 215)

Anyone who has joined in a virtual discussion as part of e-learning, whether as a facilitator/tutor or student, will know that not everyone takes part and that the level of enthusiasm shown by potential e-learning community members is very variable. There is clearly an issue of inclusion/exclusion in social e-learning. Structural reasons for exclusion from online communities have been documented, for example, access to computers at home or work (Kirkup, 2001; Selwyn, 1998), ICT skills and support available (Miller *et al*, 2000) and English language and writing skills (Hughes & Lewis, 2003). These barriers are socially constructed and are therefore influenced by discourses of gender, ethnicity, class etc. (Heemskerk *et al* 2005) and unpacking them could be a paper in itself. But, as Gorard and Selwyn (2005) have demonstrated, ICT use and the flexibility it offers plays little role in widening participation in learning and it is the usual factors relating to class, educational background and occupation which predict whether or not people will engage in learning online.

However, my focus is on inclusion/exclusion and diversity for those learners who are already taking part in e-learning rather than initial access learning. Diversity does not end when a learner enrols on a programme and studies of retention show that exclusion can occur from within (Yorke, 2002; 2004). Issues of identity and belonging to the institution

or programme or discipline are very important for retention (Read *et al.*, 2003), and this sense of belonging might also explain why not everyone takes a full part in e-learning and why some, and not others, are willing to persist with new and unfamiliar technologies and challenging ways of working collaboratively (Hughes & Lewis, 2003). There is some evidence that the disembodiment of e-learning makes the formation of cohesive groups online more difficult than in the classroom. Not all learners find the textual communication with unseen persons useful and fulfilling (Bayne, 2004) and many do not feel they have a social presence online (Gunawardena & Zittle, 1997). In any case, learners may be more comfortable belonging to some virtual communities than others and this is what I shall explore next.

Supporters of collaborative e-learning have been interested in how communities are formed and maintained. Wenger's (1998) work on communities of practice and situated learning has been influential on studies of online community building. He describes how communities of practice form when people mutually take part in a common enterprise such as wine tasting or teaching physics, and how they develop shared resources and negotiated meanings around this practice. Members learn about the shared practice by being situated in the community. Wenger emphasises that community members need to move on identity trajectories which align with the goals negotiated by the community to become a situated learner in that community. This identity must be reconciled with other community memberships and identities to form a complex and personal sense of self.

However, the importance of identity in forming effective groups for online courses in Higher Education is not well explored. McConnell (2006) alluded to the importance of linking a learning identity with a professional identity, but the intrapersonal and interpersonal conflicts that can arise through multiple identity construction that interest me were understated. Perhaps diversity of identity, which is so important for understanding inclusion in the physical world, is neglected online because the relative anonymity is assumed to overcome exclusion based on colour of skin, gender, accent etc. which might occur if community members were physically present (Rogers & Lea, 2005). But, online groups where the participants do not know much about each other beyond a name, and where the diversity of the community may be more 'hidden', can still be exclusive. This is because textual communications provide plenty of other clues about gender, professional identity or ethnicity even if not everyone is fully aware of them (Hughes & Scott, 2005). For example women post more frequently while men send longer messages (McSporren & Young, 2000; Herring, 1994). To understand how online identity is expressed we need to appreciate how identity is discursively constructed.

Identity theorists have long argued that identity is not fixed but is performed according to the context (Goffman, 1978; Bulter, 1990). Gender, for example, is very complex and a woman could present herself as a nurturing mother in one situation and a high powered businesswoman in another. Identity is multiple, fluid and under continual construction and reconstruction. But, identity is not an improvisation on an open stage without a script: there are constraints. To make sense of ourselves, maintain some consistency of identity and be socially acceptable, a person needs to align themselves with the prevailing

meanings or discourses of some identities, but reject others. From such a poststructuralist perspective, identity is a position available in discourse which can be taken up or rejected (Davies, 1989). For example, within a dominant discourse of science and technology as abstract, rational and detached, an identity position of scientist is not available to women with a gender identity constructed though discourses of femininity which reject such 'masculine' ways of knowing and doing (Hughes, 2001). This usually obscure process of constructing identity within dominant discourses explains why decades of campaigning to attract more women into science and technology has had only partial success. To identify as scientists or technologists, women would have to challenge and reconfigure prevailing discourse of science and/or femininity. Dissociation from a scientist identity is a far easier option.

Poststructuralists focus on how identity is constructed through language: spoken and written. Even when identity is manifest in a physical attribute or behaviour, this is mediated and interpreted through language. To understand how identity is constructed through a variety of texts, it is necessary to consider the concept of discourse. Discourse refers to any written or spoken language but it can be interpreted at different levels. Faiclough (1989, 1992) distinguishes between macro and micro-level discourse analysis. At the micro-level of texts and conversational analysis, attention is paid to every pause and inflexion and word used in speech. But at the macro-level, social discourses frame interpretation of text. The latter might include discourses of gender: what counts as femininity or masculinity, political rhetoric swaying voters or discourses of how a patient and doctor should interact. Fairclough explains how all macro-level discourses are

imbibed with relations of power so that the masculine discourses imply male superiority and female inferiority and the doctor is 'the expert' compared to the patient whose knowledge is lacking.

A poststructuralist analysis of identity pays attention to both the micro and macro levels of discourse. Macro level discourse allows identity or subject positions to become readily available for persons to adopt and this identity is manifest at the micro-level of textual interaction and writing style. A social identity of class or gender may appear to be the same as the one recognised by a traditional sociologist, but the poststructuralist perspective allows more possibility of negotiation, resistance and change.

# Identity congruence: an emerging theory for understanding diversity and belonging in online learning groups

The process of constructing and reconstructing identities within wider discourses and practices may become more transparent when the main form of communication is written text, as it is in most virtual communication. Turkle (1995) has shown that it is relatively easy for people to construct fluid and multiple identities for themselves online in chat rooms and games and 'play' with new identities and avatars and since then Ewins (2005) has shown how identity can be constructed in weblogs. Wenger also (1998) implies that it is quite easy for an individual to reconcile multiple identities. However, these commentators do not take account of powerful social discourses which frame identity construction at the micro-level and provide reasons why people might be excluded or

exclude themselves from certain activities. Studies have shown that it is not easy to reconcile social identities such as class and gender with being a student. For example, Blaxter & Britton (2001) explore how mature learners found it difficult to align their academic identity with their membership of working class communities because they had to acquire a new exclusive academic language. Some learners may overcome such contradictions, but others may become excluded from academia. If, as I have argued, identity 'matters' online too, then the question of social inclusion/exclusion is just as important.

Although, as Wenger has shown, many different groups and communities might foster learning, there are groups that are distinctive in that their whole purpose is formal and assessed learning. Such groups are my main focus although that is not to deny the importance of learning in informal and more spontaneously generated groups. Educational groups are not necessarily self-selecting. People find they are with a cohort studying for the same course and/or they may be assigned smaller working groups. Sometimes learning groups are able to select each other. These differ from member-led groups such as psychotherapy groups (Bion, 1961) or professional support networks and communities in that the purpose of the group has been pre-determined in a course or syllabus, although it could possibly be renegotiated.

A formal learning group identity is no different from an individual identity in that it is also formed and negotiated through discourse. The only difference is that the discursive process is collective. Group identities can be quite temporary and ephemeral when a

group is working together on a short task, or be robust and enduring in a three year programme of study. The group identity and its working processes will be continually under negotiation and it will be influenced by wider educational and social macro-level discourses as well as discourse internal to the group. A shared group identity may be explicitly acknowledged by group members: it could be agreed that they are the students on a programme or members of a subgroup X who are supportive towards each other during an activity or task. But, less obviously, the identity of the group will be implied through the micro-level rules and behaviours that emerge as dominant in the group which are in turn influenced by macro-level discourse.

To understand the wider social influences on learner identification with a particular community, I propose a new concept of identity congruence. Congruence will occur when an individual's social identities such as ethnicity, nationality, gender and occupational status are consistent with the topics and patterns of communication and associated discourses of identity that are made available by an online group or community. Where there is identity congruence we would expect an individual to be much more likely to participate fully in a group than where there is incongruence. In the latter case, situations of disharmony may arise between identities of members or there may be conflicting available identities for an individual, perhaps leading to limited engagement with the group or unresolved challenge to its purposes.

Wenger (1998) argues that not all communities of practice are learning communities. As new members join and move from peripheral to fuller participation, they bring with them

contacts with other communities and new ideas. In other words they bring diversity to the common enterprise and this is what enables the community as a whole to learn and develop. A community which requires new members to become replicas of existing members may become stifled and resistant to change and growth; a community that does not allow diversity will not be a learning community. Individuals with identity congruence with the group may learn within it, but they will become enculturated into a firmly established community of practice and will not challenge the status quo. Thus, a learning community or group needs to find ways of viewing outsiders as potential members and establishing sufficient congruence between these individual identities and the evolving group identities.

### Negotiating identity congruence and inclusion

From a perspective that identity is contingent and continually under (re)construction, identity congruence is not a given but requires negotiation and a position of congruence or incongruence will be subjective. If experienced, congruence will inevitably be partial and temporary although in longer-term groupings, such as discipline cohort, stability may emerge. Identity congruence is therefore not measurable and can only be understood by close examination of group and individual interactions. In this section, I will give some examples of how identity congruence is negotiated by drawing on studies of online learning and teaching.

Most people are usually willing to introduce themselves to an online group if prompted. Following Salmon's (2000) five stage model for e-moderating, it has become standard practice for e-learning courses to start with an introductory exercise. As the community begins to coalesce around a particular enterprise and associated behaviours, identity in/congruence develops between individual participants and the group. A match between the topic of online discourse and an individual's interests and identity is the most obvious way in which identity congruence might develop or not. For example, if the online communication is about British/US films, then someone with an identity constructed around Asian film viewing might be reluctant to take part, and vice versa. But interest in the content might not be the most significant manifestation of diversity. In online communities there may be different ways of interacting: asynchronous or synchronous, different patterns of participation in terms of frequency, regularity or time of day/night, different writing styles: formal or informal, lengthy or succinct, academic or personal, and different learning approaches: collaborative or independent, supportive or challenging. All the above are potentially implicated in the construction of identities in discourses of class, gender etc. Certain people will readily develop congruence with the group while others will find it difficult and may present a challenge.

In my online teaching I have set up co-operative activities which seem to work well in encouraging many learners to join in, but there will invariably be someone who posts a contribution at a much later time than the rest of the group perhaps because their dominant identity is constructed using work or domestic responsibilities which take priority over being a learner. As a consequence of late posting they will probably not

elicit a response from anyone. In one such example a female group member reported that she was excluded from the group activity:

"Due to the time constraints there was a "sell by date" to the contributions as am doing now. Despite reading others contributions my participation in the discussion was limited as new threads were started to ensure assessment criteria was fulfilled. As much as I appreciated I could go to the discussion board at any time, it appeared late entrants rarely got any feedback"

In such situations group members do not query why the person was delayed or welcome this possible example of diversity by negotiating new patterns of interacting or new subject material which might be of benefit to everyone. Individuals may of course change their practice of delaying posting in future. But, it is not just the responsibility of the individual to establish congruence, the community can adapt to assist members in developing congruence. Participants would need to notice when someone was not receiving any replies to their postings and make adjustments to group practice-in other words respond to the challenge posed when a member does not fit in. Alternatively, group members and/or facilitators could encourage another member to reflect on their identity construction to help them identify more with the group. Sometimes it might be important for all members to become more similar, for example, it might be important for all members to become active rather than passive learners.

But such supportive team working, in which difference is seen as positive, does not always readily occur in traditional settings and will certainly need encouraging in a virtual medium. In her well-established work, Salmon (2000) explains how e-facilitators and e-learners need to ensure the communication process runs smoothly and that participants adhere to agreed protocols, but apart from McConnell's (2006) claims for the highly supportive behaviour of learners and tutors on his MEd in E-Learning programme, there is little evidence on whether or not good e-facilitators and e-learners themselves succeed in ensuring inclusion online through developing identity congruence for a diversity of members. I next consider that underlying the best intentions of promoters of collaboration and co-operation online are some troubling paradoxes.

## Paradoxes to resolve for those seeking equitable participation in e-learning

I have challenged the over-optimistic assumptions that e-learning communities are inclusive of diversity by proposing that building identity congruence between individuals and the group is key to ensuring participation. But, negotiating identity congruence in micro-level discourse is not straightforward because of three paradoxes for e-learning designers and e-learners which emerge when diversity is brought to the foreground, paradoxes, which although manifest offline, are more significant online.

The first paradox concerns the development of a cohesive e-learning group with which an individual can identify. To develop a shared purpose and encourage identity congruence, a designer of collaborative e-learning activities could set up a structured learning

environment which guides learners through discrete activities and topics for discussion. Lisewski and Joyce (2003) give examples of how e-learning courses have been rigidly based on the Salmon's (2000) canonical five step model even to the extent of allotting one week per stage. With structure, everyone is clear what belonging to the group entails and the emphasis is on commonality in ways of learning. There are several models for group development which have currency in education, Tuckman for example, and these assume groups are working in an established pattern towards an externally imposed deadline (Hartley, 2005).

But structure also inhibits diversity and the opportunities for learners to bring their different perspectives to the learning. In the example above I designed structured weekly tasks and this worked well for those whose identities were consistent with entering the discussion forum at the beginning of the week: they could determine the style of communication whether academic or informal and set the expected length of contributions. However, those who joined late in the week arrived to an already established group and communication style. Latecomers reported that they did not read many other messages or receive feedback from others and identity congruence with the group was lacking. Thus, the e-learning environment was not experienced as flexible by all.

Alternatively, a designer could hand over the learning space to learners to shape it the way that suits them. But, this means that initially there is no clearly established community for learners to identify with, and the result could be the too familiar situation

of a discussion forum that is devoid of postings. Alternatively, there is the risk of one dominant group member or sub-group taking over the space and inhibiting development of identity congruence for others. In his Distributed Problem Based Learning approach, McConnell (2006) suggests as a compromise a transition from structured to unstructured learning with a "..strategic scaffolding in which we provide a loose but highly visible initial structure that is gradually reduced..." (p 40). But despite this compromise, he gives a clear example of a dominant group member persuading the rest of his group to address his espoused problem and not the one agreed collectively. The tension between diversity and commonality is always there: where there is structure that promotes commonality, diversity may be repressed, and where there is little structure, inequalities may emerge. Designing for diversity and community building simultaneously seems impossible.

The second paradox concerns how much learners need to know about each other. People may be cautious about introducing themselves and giving information online. Micro-level identity congruence will be difficult to establish if online identities are in doubt: the group will not know whether it is embracing diversity or not. A solution recommended by Salmon (2000) is to share personal information and this may help identity congruence to develop. But, making identities very explicit may draw attention to identity incongruence. Introducing oneself explicitly in detail to the group at the start may highlight difference and result in lack of identity congruence being more obvious for a particular learner. A group could at best ignore diversity and at worst close ranks against

those who do not appear to fit as in, for example, online sexual harassment or cyberstalking (Adam, 2001; Spender, 1995).

A study of an online 'identity swapping' game which required participants to interpret the fabricated gender, nationality and age of anonymous contributors (Hughes & Scott, 2005), showed that participants were very anxious about making errors of judgement when they tried to find out more about each other's identities. There also was mistrust of online identities and reliance on stereotypical assumptions such as equating interest in sport with males. Such a climate of uncertainty and caution over making identity explicit is not favourable for the reconstruction of individual and/or group identities that might be required to negotiate congruence.

The tension between knowing too little and knowing too much about each other's differences arises in situations other than online, but because of lack of online listening skills or the ability to 'read between the lines' learners in the example above were not confident about how to interpret the identities of others constructed through online text. Most people had only a vague notion of how the language and style of online communication could inform them about the identity of the contributor in the same way that mannerisms and other non-verbal communication convey information about identity in conventional classroom interactions

The third paradox is that one person's inclusion could be another person's exclusion.

There could be a whole host of examples of groups re-negotiating to include some

members while at the same time excluding others when deciding what topic to pursue, who will lead the group or how the group will manage time. I have come across this several times in online collaborative work: those who need time to make their contribution cause aggravation for those who are ready to move faster and vice versa. In once instance a conscientious female group co-ordinator became very anxious because other members of the group did not appear to be uploading any work to the virtual learning environment and meanwhile the submission date was approaching. Her behaviour was consistent with a discourse of femininity as both high achieving educationally and facilitating of others. She stated:

"I always check my emails in the morning, sometimes in the evening anyway and some of it was checking to see if anybody in our group had put any more work on because I was getting a bit panicked."

The group did produce the work at the last minute but while other members, male and female, with less active or motivated approaches to learning appeared happy with this way of working, this did not accommodate the gendered identity of the co-ordinator as a well prepared student. Identity incongruence was not acknowledged and opportunities for the group to explore new ways of learning together were missed. It is difficult to please everyone in other settings too, but some of the conflicts such as the different approaches to time management are especially pertinent in asynchronous communication modes where there is more transparency over group processes, but not necessarily more awareness of how to resolve differences.

### Making learning communities more inclusive: imagining the future

There are no easy resolutions to these paradoxes, but viewing group learning as a process where identity congruence for members is under constant negotiation can help. Managing the tensions between commonality and diversity in social e-learning requires that commonality for developing group purposes and clear identity positions is maintained, while the group is also encouraged to shift its position.

Thus, inclusive online learning communities need to have not only a structured environment to build shared enterprise and identities, but also freedom of imagination for how things might be different so that the environment can be challenged and it does not become insular, static and exclusive. Group members need to know who people are but not from a rigid, preconceived view obtained perhaps from an introductory message or photograph, but through the ability to analyse and interrogate micro-level textual communication to recognise and diversity and welcome difference. Everyone will need to be vigilant and acknowledge that negotiations to include some aspects of diversity might mitigate against inclusion of others. Thus, an online group must be reflexive and self critical, but not be too self congratulatory, and recognise that the risky experience of discomfort and conflict might be more of a learning experience than harmonious interaction.

But these potential resolutions of some of the tensions between diversity and commonality bring me to another problem. Learning in online groups is still relatively new and participants may not have the skills to interpret text for indications of diversity (Hughes & Scott, 2005). There is whole new language and set of behaviours for elearning collaborators to understand to be able to 'read between the lines' of textual communication. The first step is to appreciate that identity is discursively constructed.

I imagine a future where e-learning facilitators and e-learners alike have developed these 'online listening' skills. We would soon be alerted if someone is not comfortable with the way of interacting in a group and we would be able to intervene before that person withdrew. If faced with fifty messages to read online it is tempting to look at those which superficially appear most interesting. An online listener would notice a message from someone who may be on the verge of exclusion and prioritise it even if that contribution is challenging or seems out of place. Such an engagement with difference might trigger a departure from current thinking and stimulate learning for the group. Diversity cannot be planned for in advance and the benefits of confronting diversity will always be unpredictable. To prioritise being inclusive and to welcome the personal challenges that diversity might bring, we would need to understand identity congruence and be able to accept and manage the contradictions inherent in being inclusive online.

### References

Adam, A. (2001) Cyberstalking: gender and computer ethics, in: Green, E. & Adam, A. (Eds) *Virtual Gender: Technology, consumption and identity* (London, Routldege).

Baxter, A. & Britton, C. (2001) Risk, Identity and Change: becoming a mature student, *International Studies in Sociology of Education* 11, pp. 87-102.

Bayne, S. (2004) 'Mere Jelly': The Bodies of Networked Learners, Networked Learning Conference, Sheffield.

Bion W.R. (1961) Experiences in groups and other papers (London, Routledge 1996 edition).

Butler, J (1990) Gender Trouble: Feminism and the Subversion of Identity (London, Routledge).

Davies, B. (1989) Frogs and Snails and Feminist Tales (London, Allen Unwin).

Ewins, R. (2005) Who are you? Identity and interchange in academic weblogs. *E-learning*, 2(4), pp.369-378.

Fairclough, N. (1989) Language and Power (London, Longman).

Fairclough, N. (1992) Discourse and Social Change (Cambridge, Polity).

Freire, P. (1972) *Pedagogy of the Oppressed* (Harmondsworth, Penguin).

Goffman, I (1978) *The presentation of Self in Everyday Life* (The Penguin Press, London) (first pub. UK 1969, USA by Anchor Books in 1959).

Gorard, S & Selwyn, N (2005) Towards a le@rning society? The impact of technology on patterns of participation in lifelong learning, *British Journal of Sociology of Education* 26,1, pp. 71-89.

Gunawardena, C. & Zittle, F. (1997) Social Presence as a Predictor of Satisfaction within a Computer-mediated Conferencing Environment *The American Journal of Distance Education* 11, 3, pp. 8-26.

Hartley, P (2005) Students' skills in groups and teamworking, in: Hartley, P., Woods, A. & Pill, M. (Eds) *Enhancing Teaching in Higher Education* (Abingdon, Routledge).

Heemskerk, I., Brink, A., Volman, M, & Dam, G. (2005) Inclusiveness and ICT in education: a focus on gender, ethnicity and social class, *Journal of Computer Assisted Learn*ing, 21 pp.1-16.

Herring, S. (1994) Gender differences in computer-mediated communications: bringing familiar baggage to the new frontier.

http://www.mith2.umd.edu/WomensStudies/Computing/Articles+ResearchPapers/gender
-differences-communication [Accessed Feb. 2005]

Hughes, G. (2001) Exploring the Availability of Student Scientist Identities within Curriculum Discourse: an anti-essentialist approach to gender inclusive science, *Gender and Education* 13, 3, pp. 275-290.

Hughes, G and Lewis, L (2003) Who are successful online learners? Exploring the different learner identities produced in virtual learning environments, in: Cook, J. & McConnell, D. (Eds) *Communities of Practice*. Research Proceedings of the 10th Association for Learning Technology Conference (ALT-C 2003). Held 8 - 10 September 2003, The University of Sheffield and Sheffield Hallam University, UK

Hughes, G. & Scott, C. (2005) No pain no game: use of an online game to explore issues of online identity and the implications for collaborative e-learning, *E-Learning*, 2, 4, pp. 388-401.

Kirkup, G. (2001) Getting our Hands on IT. Gendered Inequality in Access to ICTs Conference paper at *Gender and Virtual learning*, Hagen, Germany.

Lather, P. (1991) Getting Smart: Feminist Research and Pedagogy With/in the

Postmodern (London, Routledge).

Lisewski, B. & and Joyce, P. (2003) Examining the five-stage e-moderating model: Designed and emergent practice for the learning technology profession, *Association for Learning Technology Journal*, 11, 1 pp. 55-66.

McSporren, and Young, S. (2001) Does Gender Matter in Online leaning? *Association for Learning Technology Journal* 9,2, pp. 3-15.

McConnell, D. (2006) *E-Learning Groups and Communities* (Maidenhead, Open University Press).

Miller, N., Kennedy, H. & Leung, L. (2000) Tending to the tamagotchi: rhetoric and reality in the use of new technologies for distance learning, in Wyatt, S, Henwood, F.Miller, N. & Senker, P. (Eds) *Technology and In/equality. Questioning the information society* (Routledge, London).

Read, B., Archer, L. and Leathwood, C. (2003) Challenging Cultures? Student Conceptions of 'Belonging' and 'Isolation' at a Post-1992 University, *Studies in Higher Education*, 28,3, pp. 261-277.

Rogers, P. and Lea, M. (2005) Social presence in distributed group environments: the roles of social identity, *Behaviour & Information Technology*, 24,2, pp. 151-158.

Salmon, G. (2000) *E-moderating: The Key to Teaching and Learning Online* (London, Kogan Page).

Selwyn (1998) The effect of using a home computer on students' educational use of IT, *Computers and Education*, 31, pp. 211-227.

Spender, D. (1995) *Nattering on the Net: Women, Power and Cyberspace* Spinifex (Press, Melbourne, Australia).

Turkle, S. (1995) *Life on the Screen: Identity in the Age of the Internet* (New York, Simon & Schuster).

Wenger, E (1998) *Communities of Practice: Learning, Meaning and Identity.* (New York, Cambridge University Press).

Yorke, M. (2002) Academic Failure: a Retrospective View from Non-completing Students, in: M. Peelo & T. Wareham (Eds) *Failing Students in Higher Education* (Buckingham, SRHE and Open University Press).

Yorke, M. (2004) Retention, persistence and success in on-campus higher education, and their enhancement in open and distance learning, *Open Learning*, 19,1, pp. 19-32.