

By: Kyriaki Anagnostopoulou, Deeba Parmar and Jacqueline Priego-Hernandez

Published: February 2009 in [Volume 2, Issue 4](#) | Type of Article: [Research Paper](#)

Abstract

This paper discusses the relationships that first-year students have with learning and with technology. Due to the lack of previous work linking e-learning with student retention, differences between 'withdrawers' and 'persisters' were explored. Data were collected using interviews and questionnaires and analysed using thematic analysis. Evidence of a deficit approach to e-learning appears to manifest itself in both groups and technologies that promote social interaction were primarily reserved for personal use rather than within an institutional context. Recommendations from this research include the need to learn how technologies promoting social interaction are used and incorporate lessons learnt into the design of e-learning experiences.

Introduction

The '*Managing Connections: using e-learning tracking information to improve retention rates in higher education*' project funded by the Higher Education Academy aims to explore how e-learning tools, specifically tracking data, can be used to inform institutions of trends and data concerning students' usage of e-learning materials during their university careers. This paper draws upon qualitative research that was carried out as a part of this project to investigate how students view themselves as learners and as e-learners. Situated within the theoretical domains of e-learning and students' retention, this work aims to explore the views about learning with technology that are held by students who chose to withdraw from higher education and to compare and contrast them with the views held by those that persist. The intentions of this work are to inform e-learning and to support practices to enhance the student experiences.

↑

Context

Acknowledging the current relevance of technology in learning, numerous studies have recently been conducted involving e-learning amongst HE students. The literature has mainly focused on the definition of e-learning and its relation to concepts such as blended and online learning (Garrison and Kanuka, 2004; Jones et al., 2007; Oliver and Trigwell, 2005); the students' practices, understanding and use of technology in relation to e-learning; and the institutional and organisational implications of the use of technology in learning (de Freitas and Oliver, 2005; Salmon, 2005; Bourlova and Bullen, 2005). For the purposes of this study the researchers adopted the HEFCE's (2005, p. 5) definition of e-learning as 'any learning that uses ICT'.

The use of virtual learning environments has been increasingly incorporated into UK universities, with post-92 HE institutions appearing to have the largest use by both students and staff (Browne et al., 2006). Conole et al., (2007, p. 511) recommended that 'students are immersed in a rich, technology-enhanced learning environment and that they select all appropriate technologies to their own personal learning needs'. However, as Sharpe and Benfield (2005, p. 2) have pointed out in their review of literature on the student experience of e-learning in HE, 'collecting student experiences frequently produce[s] complex and contradictory findings'. Deepwell and Malik (2008) found that participants acknowledged the Virtual Learning Environment (VLE) as the first reference point for e-learning and that it was in general

appreciated by the students. In contrast, Conole et al., (2006, p. 156) reported that 'students showed a marked lack of enthusiasm for VLEs'. However, all of the above studies agree with regard to the variety of activities for which students engage with ICT, these being, among others, retrieving information for various purposes (lecture notes, presentations, readings) and communicating with lecturers, friends and fellow students, as well as revision and self-assessment.

Several studies have been conducted that have as their main objective to map the activities that students undertake within institutional VLEs (e.g., Dutton et al., 2004; Beasley and Smyth, 2004; Aspden and Helm, 2004; Concannon et al., 2005). These studies make it possible to discover how students engage with this technology, which is designed specifically to aid their learning. These studies illustrate the views, intentions and commitment of the students in relation to the specific facility of the VLE. One point for further development is the relationship that the use of VLEs might have with the students' engagement with other technologies, for a more holistic approach.

The relationship between e-learning and retention has been explored by analysing the persistence of students within online, open and distance courses (e.g., Simpson, 2004, 2006). However, the use of ICT in the learning experience of on-campus students and its relation to student retention has not been widely researched.

Much emphasis has been placed in recent years on student retention and progression, with numerous government reports and White Papers encouraging the sector to explore and address issues of non-completion (DFES, 2003; NCIHE, 1997). Interest in this area has resulted in a proliferation of research papers frequently citing course choice, expectations, academic preparedness, academic-related concerns, administrative and/or organisational concerns, social and/or personal factors and dissatisfaction with the student experience at the institution as reasons for early student withdrawal (Harvey et al., 2006; Yorke, 1999). This has led to many UK universities undergoing organisational changes around student retention policies which, according to Waggoner and Goldman (2005, p. 86), have been undertaken under the premise of creating a 'caring and student-friendly' campus environment.

↑

Methodology

↑

Research questions

This study explores the relationships that first-year students have with learning and with technology. Central to the research is the acknowledgement of the students' accounts in their own right, recognising the value and importance of their experience as learners. The aim of this study is twofold. First, it seeks to retrieve and characterise students' views on learning and on the use of technology. Second, the research seeks to compare the views offered by students who withdrew with those of students who persisted. The following questions guided the research:

a) What are the characteristics of the students' responses when they are requested to give accounts of their engagement with learning and with technology?

b) Did students' views on technology differ between their personal lives and their learning lives? If so, in what ways were they different?

c) Did the views on learning with technology differ between withdrawn students and persisting students? If so, how did they differ?

↑

Research design

The research was designed as an exploratory study due to the lack of previous work linking e-learning with student retention and persistence. Following the research questions previously stated, any differences between students who withdrew and students who persisted were explored by a two case study research design; that is, through comparisons between two groups: 'withdrawers' and 'persisters'.

↑

Size and nature of the sample

Acknowledging that withdrawal is the result of a complex process concerning the interaction between individuals and the educational institution (Tinto, 1993), the research focused on students from a single UK post -92 higher education institution. The institution contains a diverse student body with the majority from non-white backgrounds, and high numbers of international students (15.9% of a total student population of more than 25,000).

A total of 42 withdrawn students participated in this research. The data pool was identified from retention data from the first ten weeks of the academic year 2007-8 and included only students who informed the university during this time of their intent to withdraw or interrupt their studies. This is consistent with the literature that states that students tend to withdraw from their courses within the first six to eight weeks (Parmar and Trotter, 2004). The withdrawn students sample comprised 46% of all first-year, undergraduate students who withdrew or interrupted during this period. The second group of participants consisted of 130 persisting students. These students commenced their studies in the same academic year as the withdrawn sample.

↑

Instruments

It has been reported that there is a scarcity of studies of the learner experience in which the learners' own expressions and understandings are central (Sharpe et al., 2005). Acknowledging this, data were gathered through two methods. First, telephone interviews were used to elicit how withdrawn students engage with technology across different aspects of their lives and, in particular, in relation to learning. Second, the exact same questions were asked of students who persisted through the use of questionnaire.

The questions in both the interviews and questionnaires focused on personal experience, perceptions of learning and the use of technology.

These fell into four categories:

1. Previous personal experiences of learning
2. Perceptions of learning
3. Use of technology in their personal lives
4. Use of technology for learning

↑

Procedures

Data collection took place between January and April 2008. As the participants who had withdrawn from or interrupted their studies were no longer physically on campus, interviews were carried out by telephone, recorded (with consent) and transcribed verbatim. Consistent with good practice (Frey and Oishi, 1995) it was decided that a maximum of five attempts would be made to contact each withdrawn student. The telephone was allowed to ring a minimum of five times before ending each attempt.

Frey and Oishi (1995) state high refusal rates are not uncommon for telephone interviews and response rates were expected to be 10% below those that would be expected if they were conducted face to face (Thomas and Purdon, 1994). However, in this research 46% of all students who had withdrawn from or interrupted their studies were interviewed, resulting in a rich data set. A total of 42 successful interviews resulted from 427 attempts (205 to landline, 222 to mobile telephones).

Both persisting and withdrawn students were from the same academic cohort.

Data collected from persisting students was via a questionnaire administered by their module leaders and responses were collected anonymously. This resulted in 130 questionnaires being returned forming the data set for 'persisters'.

↑

Data Analysis

Data gathered from both research methods was combined and analysed using thematic analysis: a systematic process for organising and describing the data in detail (Braun and Clarke, 2006). The main reason for selecting this technique was its flexibility as it allowed the development of a coding frame that fit the explorative approach of this study. A combination of literature resources (Boyatzis, 1998; Attride-Stirling, 2001; Braun and Clarke, 2006) was used as a guide to develop the coding frame. The construction of the coding frame was 'data driven' (Boyatzis, 1998): it sought codes that followed a pattern and each pattern was encompassed in a category. Categories that were interrelated were then labelled in global

themes. The coding frame was organised and each global theme, category and code was summarised and defined. Finally, representative quotes were added to the coding frame.

The generation of the codes was undertaken individually by three researchers and the *inter-reliability* of the coding was assessed. The final coding frame comprised categories agreed upon by the three researchers. After specifying the inclusion and exclusion criteria, the three researchers coded the data accordingly, verifying consistency across the cases.

The researchers were aware of the potential pitfalls of combining and comparing data collected in different ways. Of particular concern was the influence of the methods used in the reliability and accuracy of the information obtained. Therefore actions were taken to mitigate this risk. For example, in the interviews the researcher was able to probe the withdrawn students, which is not possible when administering questionnaires. Instead, the probes used in the interviews were also included as part of the questionnaire design. However, the combining and comparing of data in this way is acknowledged here as a limitation of the research.

↑

Findings

↑

Students who withdrew

Withdrawn students were asked to recall, describe and evaluate a recent learning experience that took place in a formal educational setting (school, college, etc.). In the process of recalling an experience, details are naturally added, descriptions are developed and refinements are made (Moustakas, 1994). However, their descriptions were limited and participants needed a significant amount of prompting by the interviewer. Most of the withdrawn students reverted to discussing the physical setting and the environment rather than describing the way in which they learnt. These material elements had not undergone what Husserl terms 'formal shapings' and 'gifts of meaning' which occur in reflective processes aimed at guiding personal understanding of experiences (1931, cited in Moustakas, 1994, p. 72). Any experiences recalled and comments offered by each participant under this set of questions made up the 'experiential model' of learning of that participant.

Participants were also asked to describe what they perceived was the way in which they learnt most effectively. Responses and comments offered by each participant under this set of questions made up the 'perceptual model' of effective learning of that participant. The way in which withdrawn students felt they learnt most effectively, more often than not, was perceived as an activity that involves being open to information that is gathered from different sources and then contained and held as in a repository. In this method, what the researchers have termed 'reservoir learning', there is a lack of explanation as to how to access the information stored and learning is merely an act of accumulation. Participants often expressed the need to have the ability to 'receive' learning, although tutors were rarely mentioned as needing to be good at 'filling' them with knowledge. They were experiencing no sense of 'self' in their learning but instead were setting themselves up as empty vessels waiting to be filled. The following quotations extracted from the interviews provide examples of how this transmission model of learning works:

'You take things in' (withdrawn student 21).

'I think you have to have a very, erm, re-collective memory. You have to be able to erm, memorise things' (withdrawn student 62).

'... I normally listen to it and ... I won't say memorise, but picture, you know, the information that I'm getting. So conserve all the information ...' (withdrawn student 66).

Although limited in their descriptions, when asked about their personal experience, withdrawn students tended to describe learning situations from formal schooling where they were active participants, as well as experiences which were of a more social constructivist nature (i.e., engaging with others and learning through doing). However, when they were asked about how they perceived they learnt most effectively they often defaulted to describing the 'reservoir' approach, thus highlighting a gap between their model of learning derived from previous experience (experiential model) and their perceived model of effective learning (perceptual model). Furthermore, for some, the reservoir model was an expectation which confirms Kolb and Kolb's (2005) view that students enter higher education conditioned to be passive recipients of what they are taught:

'That's how you learn at university' (withdrawn student 10).

These participants made a clear distinction between passively learning *from* (being taught, watching demonstrations, etc.), learning *through* (by sitting next to or in the vicinity of intelligent peers) and actively learning *with* others (discussions, group work, etc.). Occasionally they perceived their peers as obstacles. In these cases, far from perceiving learning as a collaborative activity, independent study was favoured, as exemplified by the following statements:

'... especially in lessons where you're taught in a group ... interrupting ... causes a problem' (withdrawn student 27).

'... working independently so I know what I'm doing and so I don't get distracted with other people's points of view' (withdrawn student 92).

During the interview, although none of the questions asked directly about the topics of their research, participants constantly referred to this as one of the elements needed in order to learn. However, research was consistently expressed as the 'search' and collection of information, without acknowledging any further attempt to evaluate, analyse or assimilate this information. Furthermore, they illustrated how they used technology to (re)search. The statements below exemplify this:

'... obviously a computer can display research information that is effective to your learning' (withdrawn student 78).

'... search engines, if I'm looking up a topic to get information' (withdrawn student 19).

For withdrawn students, experiences in relation to learning through the use of technology were expressed in two main ways. The first way views e-learning as remedial. In this deficit model, e-learning is seen as a solution to a problem, especially when it involves correcting or improving the student's performance:

'I guess like the easiest way out really ... because if you haven't got books and stuff, I suppose the Internet has ... yes, it really is the best tool' (withdrawn student 92).

'... it's a shortcut to learning ... and it also gives me time to do other things' (withdrawn student 61).

The second way in which withdrawn students engage with e-learning is to assign certain attributes to technology. Thus, instead of relating themselves as social agents who engage with technology in order to learn, students see technology as

a medium with features that serve as aids. In their responses they attributed to the technology characteristics and abilities which did things or made them do things in a particular way:

'... it makes you produce a good work, neat work, nice, clear and precise' (withdrawn student 87).

'The internet opens you up ... you have this infinite amount of information' (withdrawn student 19).

'It opens your mind up ... the Internet can help you in all ways for studying' (withdrawn student 43).

'It cuts the time in half' (withdrawn student 61).

The evidence of a deficit approach to e-learning appears to manifest itself in both tutor actions and student views of how technology can be used in learning. Specifically, the way in which the use of technology within particular learning situations is introduced and integrated into face-to-face practice influences the way it is perceived and used by the students.

↑

Tutor actions:

'Um, we were told to use it by our tutors ... just to check up on any extra information...' (withdrawn student 84).

'[The lecturer] just said go onto that and you'll see, if you miss your lectures or something, go onto that and that ... I'll have all my lectures there' (withdrawn student 46).

↑

Student views:

'I'm sure [the VLE] is there for students that actually need help with their work, and I didn't really need it at the specific moment ...' (withdrawn student 78).

'Um, just sort of looking up things that I don't understand, or finding additional information on things' (withdrawn student 19).

↑

Students who persisted

The results of the analysis of the interviews with the withdrawers have been compared with the findings from questionnaires completed by students who persisted with their studies. The findings show that, in contrast with students who withdrew, students who remained showed awareness of how they learn as individuals highlighting an awareness of 'self' as a learner. This was revealed by their ability to identify their learning styles, which in turn allowed them to maximise their strategies in order to learn. Also, persistent students expressed a richer description of how they learn, which included a range of methods (videos, blogs, PowerPoint slides, practice, lectures, discussions, etc.). Furthermore, most participants from this group perceived that they learnt most effectively through active participation with their peers and in collaboration with their tutors.

These students' perceptions of how they learnt most effectively were closer in nature to the previous learning experiences they chose to describe. Their experiential and perceptual models of effective learning were very similar, which was not the

case in the group of students who withdrew from the university. However, as the questionnaires were distributed towards the end of the academic year, it is likely that the participants had greater academic engagement which may have contributed to their more sophisticated description of learning models and the deeper sense of 'self' in the learning process.

However, when responding to questions about learning through the use of technology and research as an element of learning, persistent students held similar views to those held by withdrawn students. Persistent students were as naive in the way they used technology and viewed research as those who withdrew:

'Getting relevant information from various sources' (persistent student 39). *'The benefits [of using technology in learning] are in searching and researching'* (persistent student 41). *'Technology enables me to obtain more information to be able to do my essays'* (persistent student 61). *'Technology provides an easier way to acquire knowledge. Easy access to information'* (persistent student 79).

'It's a quick way to learn' (persistent student 1).

'Quicker and easier' (persistent student 20).

Finally, both sets of participants confused IT competence with the ability to learn through the use of technology. IT skills were seen as necessary and sufficient to facilitate e-learning, but e-learning was viewed as separate to learning.

↑

Discussion

Literature states that students may benefit from understanding how they learn most effectively by reflecting on their previous learning experiences, understanding learning styles and developing meta-cognitive learning skills (Keeton et al., 2002; Kolb and Kolb, 2005). The existence of a better match between experiential and perceptual models of effective learning in the group of participants who persisted with their studies supports this view. The development of meta-cognitive learning skills is a personal developmental process and will occur at a different pace for each student. Gaining a personal understanding within the early weeks of the academic year of how one learns would be beneficial and can be further enhanced by promoting an understanding of the links between research and teaching, and therefore with learning.

With regard to the use of technology within their learning, and consistent with recent research (Creanor et al., 2006), the authors found that students neither had a great understanding nor were entirely convinced of the potential benefits of using technology in their learning. A deficit model approach to student support was evident in students' perceptions of e-learning. This traditional deficit approach, borrowed from the health sector, conceptualises problems within the individual that need to be treated in order to restore their health and wellbeing. Both students who withdrew and those who persisted held views about learning through the use of technology based on this interventionist paradigm. This was reinforced by the tutors' actions and the lack of integration of the technology into face-to-face practise, both of which were highlighted in student responses. Institutional scepticism with regard to e-learning is also highlighted by the QAA (2008) in their analysis of institutional audit reports. Their report states that several institutions were looking to keep a check on the balance between 'orthodox' learning and teaching practices and e-learning. Thus, the uncertainty surrounding the potential benefits

of e-learning appears to be spread across a number of stakeholders, from students to tutors to institutional management teams. Therefore, any action would need to be multi-dimensional and would require buy-in at many levels.

Behaviours displayed in one environment cannot always be transferred directly to a different information environment (Franklin and van Harmelen, 2007). It is unclear whether this was due to inability or unwillingness to transfer existing skills into learning situations, although there was a distinct difference in the type of technology used in the two aspects of their lives. When asked what technology students used in their personal lives on a day-to-day basis, responses more often than not included synchronous technologies which permitted immediate access to family and friends. However, when asked what technologies they used in their learning, the responses focused on asynchronous use of the Internet and the use of computers as production tools (word processing, imaging, etc.). It appears that technologies which promote social interaction were primarily reserved for use on a personal level rather than within an institutional context. This is consistent with Franklin and van Harmelen's (2007) findings, which suggest that student motivation for using social technologies appears to be linked to their perception of fun and consumption, two concepts not necessarily associated with learning in higher education.

Peer learning is reported to positively affect the achievement of outcomes for the participating learners irrespective of theoretical orientation and the mechanisms by which such outcomes are achieved (O'Donnell and O'Kelly, 1994; [Raman and Ryan, 2004](#)). Similarly, information processing theory claims that performing tasks in the presence of peers promotes greater engagement with the task at hand and can result in deeper processing (Cohen and Lotan, 1995). However, students who fail to actively participate in face-to-face or online classes may still achieve the intended learning outcomes and can do well academically despite their apparent lack of interaction (Beaudoin, 2002).

In this research, students made a clear distinction between passively learning *from*, learning *through* and actively learning *with/without* others. Far from perceiving learning within a social constructivist framework, in which the learner is an active participant and emphasis is placed on social participation, independent study was favoured by many participants. Online, lack of participation is known as 'lurking'. Students log on and observe but do not contribute to online forums and therefore are almost invisible to the online tutor. However, as students' perceptions and the learning strategies they employ in face-to-face learning situations have been validated as applicable to their experience in online environments (Dewart and Whittington, 2000) it is important to acknowledge lurking as both a personal preference and a legitimate method for learning.

Although both groups of participants portrayed differences in their understanding of how they learn, it is interesting to note that they both had similarly naive views with regard to learning through the use of technology. Contrary to Conole (2008) in the recent LXP study, the researchers found that technology did not appear to be integral to the student learning experience for anything other than ease of access to resources. Although almost all the participants – both withdrawn students and those who persisted – were technically aware and used technology as part of their day-to-day life without much thought, few actually used the technology in their learning to engage in collaborative learning tasks. Although technology appeared to be an integral part of the students' lives, it did not seem to be an integral part of their *learning* lives.

Recommendations

↑

For institutions

- Make explicit in learning, teaching and assessment strategies and in e-learning policies the benefits of using technology with the curriculum.
- Staff development should focus not only on how to use the technology, but also on how to use it appropriately to enhance the student learning experience.
- Student support for e-learning should focus on how to learn with technology and on transferring existing skills into the learning situation, not just on how to use the technology.
- Embrace technologies that students bring with them rather than exclude them. For example, mobile phones could be used for in-class voting rather than requiring students to switch them off.

↑

For academic staff

- Facilitate the development of meta-cognitive learning skills at the beginning of or prior to the start of the academic year, through workshops.
- Clearly articulate to your students the reasons why you have chosen to use learning technologies in your module or programme.
- Not all students like working collaboratively. Carefully consider the balance of group work when designing your learning materials.
- Consider how your teaching acknowledges lurking as a valid way of learning.

↑

For learning technologists

- Learn how technologies that promote social interaction are used and incorporate lessons learnt into the design of e-learning experiences.

↑

Biography

Kyriaki Anagnostopoulou is the Head of e-Learning based in the Centre for Learning and Quality Enhancement at Middlesex University. As such, her work aims to inform institutional policy and practice. She is responsible for co-ordinating the provision of support for e-learning activities across the institution and initiatives aimed at promoting the pedagogically sound uptake of learning technologies. Her current interests include researching the learning experience and links between leadership and learning in educational organisations.

Deeba Parmar is a Research Fellow within the Centre for Learning and Quality Enhancement at Middlesex University. Her role involves undertaking institutional research in the areas of the student learning experience, student non-completion and progression. Learning from research, she implements activities and strategies to enhance the student experience and aid student retention, progression and achievement. Her research interests include the first-year experience, widening participation and the research–teaching nexus.

Jacqueline Priego-Hernandez is a Research Assistant within the Centre for Learning and Quality Enhancement at Middlesex University. She is currently working on the HE Academy-funded project *Managing Connections: using e-learning data to improve retention rates in higher education*. Her interests concern innovative research techniques in general as well as their application in education and health-related topics. Currently she is undertaking doctoral studies in social psychology at the London School of Economics and Political Science.

↑

Contact details

↑

Kyriaki Anagnostopoulou, Head of e-Learning

Centre for Learning and Quality Enhancement
Middlesex University, Fenella, 1st
Floor, The Burroughs, Hendon, NW4 4BT
Tel: 020 8411 5148
E-mail: K.Anagnostopoulou@mdx.ac.uk

↑

Deeba Parmar, Senior Research Fellow

Centre for Learning and Quality Enhancement,
Middlesex University, Fenella, 1st Floor,
The Burroughs, Hendon, NW4 4BT
Tel: 020 8411 2247
E-mail: D.Parmar@mdx.ac.uk

↑

Jacqueline Priego-Hernandez, Research Assistant

Centre for Learning and Quality Enhancement,
Middlesex University, Fenella, 1st Floor,
The Burroughs, Hendon, NW4 4BT

Tel: 020 8411 4710

E-mail: [.\(JavaScript must be enabled to view this email address\)](#)

↑

Acknowledgements

The authors would like to thank both the Higher Education Academy and Middlesex University for providing the funding for this study. In addition, we would like to thank Professor Barry Jackson, Dr. Michelle Haynes and Karen Ridout for their kind support.

↑

References

Aspden, L. and Helm, P. (2004), 'Making the connection in a blended learning environment', *Educational Media International*, vol. 41, no. 3, pp. 245–52.

Attride-Stirling, J. (2001), 'Thematic networks: an analytic tool for qualitative research', *Qualitative Research*, vol. 1, no. 3, pp. 385–405.

Beasley, N. and Smyth, K. (2004), 'Expected and actual student use of an online learning environment: a critical analysis' [online], *Electronic Journal of e-Learning*, vol. 2, pp. 43–50. Retrieved 6 August 2008 from <http://www.ejel.org/volume-2/vol2-issue1/issue1-art21-beasley-smythe.pdf>.

Beaudoin, M. F. (2002), 'Learning or Lurking? Tracking the 'invisible' online student', *Internet and Higher Education*, vol. 5, no. 2, pp. 147–55.

Bourlova, T. and Bullen, M. (2005), 'The impact of e-learning on the use of campus instructional space', *Advances in Web-Based Learning - ICWL 2005*, pp. 397–405.

Boyatzis, R. E. (1998), *Transforming qualitative information: thematic analysis and code development*. Thousand Oaks, CA: Sage.

Braun, V. and Clarke, V. (2006), 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, vol 3, pp. 77–101.

Browne, T., Jenkins, M. and Walker, R. (2006), 'A longitudinal perspective regarding the use of VLEs by higher education institutions in the United Kingdom', *Interactive Learning Environments*, vol. 14, no. 2, pp. 177–92.

Cohen, E. G. and Lotan, R. A. (1995), 'Producing equal-status interaction in the heterogeneous classroom', *American Educational Research Journal*, vol. 32, 99–120.

Concannon, F., Flynn, A. and Campbell, M. (2005), 'What campus-based students think about the quality and benefits of e-learning', *British Journal of Educational Technology*, vol. 36, no. 3, pp. 501–12.

- Conole, G. (2008), 'Listening to the learner voice: the ever changing landscape of technology use for language students', *ReCALL*, vol. 20, no. 2, pp. 124–40.
- Conole, G., de Laat, M., Dillon, T. and Darby, J. (2006, 3–6 December), *An in-depth case study of students' experiences of e-learning—how is learning changing?* Paper presented at the 23rd Annual Ascilite Conference: Who's learning? Who's technology?, Sydney.
- Conole, G., de Laat, M., Dillon, T. and Darby, J. (2007), "Disruptive technologies", "pedagogical innovation": what's new? Findings from an in-depth study of students' use and perception of technology', *Computers and Education*, vol. 50, no. 2, pp. 511–24.
- Creanor, L., Trinder, K., Gowan, D. and Howells, C. (2006), *Who's learning and how? Researching the learner experience*. Paper presented at the 23rd Annual Ascilite conference, Sydney.
- de Freitas, S. and Oliver, M. (2005), 'Does e-learning policy drive change in higher education?: a case study relating models of organisational change to e-learning implementation', *Journal of Higher Education Policy and Management*, vol. 27, no. 1, pp. 81–95.
- Deepwell, F. and Malik, S. (2008), 'On campus, but out of class: an investigation into students' experiences of learning technologies in their self-directed study', *ALT-J, Research in Learning Technology*, vol. 16, no. 1, pp. 5–14.
- Dewart, T. and Whittington, D. (2000), 'Online learners and their learning strategies', *Journal of Educational Computing Research*, vol. 23, pp. 415–33.
- DfES (2003), *The Future of Higher Education, White Paper* [online]. Retrieved 4 August 2008 from <http://www.dfes.gov.uk/hegateway/hereform/>.
- Dutton, W. H., Cheong, P. H. and Park, N. (2004), 'An ecology of constraints on e-Learning in Higher Education: The case of a virtual learning environment', *Prometheus*, vol. 22, no. 2, pp. 131–49.
- Franklin, T. and van Harmelen, M. (2007), *Web 2.0 for content for Learning and Teaching in Higher Education* [online]. Bristol: JISC. Retrieved 8 August 2008 from http://www.jisc.ac.uk/media/documents/programmes/digital_repositories/web2-content-learning-and-teaching.pdf/.
- Frey, J. H. and Oishi, S. M. (1995), *How to conduct interviews by telephone and in person*. London: Sage.
- Garrison, R. and Kanuka, H. (2004), 'Blended learning: Uncovering its transformative potential in higher education', *Internet and Higher Education*, vol. 7, pp. 95–105.
- Harvey, L., Drew, S. and Smith, M. (2006), *The First Year Experience: A Review of the Literature for the Higher Education Academy*. York: HE Academy.
- HEFCE (March 2005/12). *HEFCE strategy for e-learning*. London: Higher Education Funding Council for England.

Jones, N., Skinner, H. and Blackey, H. (2007), *Blended learning innovations to support postgraduate dissertation students*. Paper presented at the Higher Education Academy Conference.

Keeton, M. T., Sheckley, B. G. and Griggs, J. K. (2002), *Effectiveness and efficiency in higher education for adults: a guide for fostering learning*. Contributor Council for Adult and Experiential Learning (U. S.): Kendall Hunt.

Kolb, A. Y. and Kolb, D. A. (2005), 'Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education'. *Academy of Management, Learning and Education*, vol. 4, no. 2, pp. 193–212.

Moustakas, C. E. (1994), *Phenomenological research methods*. Thousand Oaks, CA: Sage.

NCIHE (1997), *Report of the National Committee (Dearing Report)*.

O'Donnell, A. M. and O'Kelly, J. (1994), 'Learning from peers: beyond the rhetoric of positive results', *Educational Psychology Review*, vol. 6, pp. 323–49.

Oliver, M. and Trigwell, K. (2005), 'Can "Blended Learning" be redeemed?', *E-learning*, vol. 2, no. 1, pp. 17–25.

Parmar, D. and Trotter, E. (2004), 'Keeping our students: identifying factors that influence student withdrawal and strategies to enhance the experience and retention of first-year students', *Learning and Teaching in the Social Sciences*, vol. 1, no. 3, pp. 149–68.

Quality Assurance Agency (QAA) (2008), *Outcomes from Institutional Audit Progression and Completion Statistics*, Second series, Sharing good practice. Mansfield: QAA.

Salmon, G. (2005), 'Flying not flapping: a strategic framework for e-learning and pedagogical innovation in higher education institutions', *ALT-J Research in Learning and Technology*, vol. 13, no. 3, pp. 201–18.

Sharpe, R. and Benfield, G. (2005), 'The student experience of e-learning in higher education: a review of the literature' [online], *Brookes eJournal of Learning and Teaching*, vol. 3, pp. 1–9. Retrieved 8 July 2008 from http://bejlt.brookes.ac.uk/vol1/volume1issue3/academic/sharpe_benfield.html.

Sharpe, R., Benfield, G., Lessner, E. and Cicco, E. D. (2005), *Final Report: Scoping Study for the Pedagogy strand of the JISC e-Learning Programme* [online]. Retrieved 7 August 2008 from http://www.jisc.ac.uk/uploaded_documents/scoping%20study%20final%20report%20v4.1.doc: JISC.

Simpson, O. (2004), 'The impact on retention of interventions to support distance learning students', *Open Learning*, vol. 19, no. 1, pp. 79–95.

Simpson, O. (2006), 'Predicting student success in open and distance learning', *Open Learning*, vol. 21, no. 2, pp. 125–38.

Thomas, R. and Purdon, S. (1994), 'Telephone Methods for Social Surveys' [online], *Social Research Update*, no. 8. Retrieved 8 August 2008 from <http://sru.soc.surrey.ac.uk/SRU8.html>.

Tinto, V. (1993), *Leaving college: rethinking the causes and cures of student attrition*, 2nd edn. Chicago: University of Chicago Press.

Waggoner, D. and Goldman, P. (2005), 'Universities as communities of fate', *Journal of Educational Administration*, vol. 43, no. 1, pp. 86–101.

Yorke, M. (1999), *Leaving Early: Undergraduate Non-Completion in Higher Education*. London: Falmer Press.