

# Using texting to support students' transition to university

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This article argues that judicious use of mobile phone text messaging by university staff has the potential to enhance the support provided to students by an academic department during the transition to university. It reports on an evaluation of a desktop computer application, *Student Messenger*, which enables staff to send text messages from their computers to the mobile phones of groups of students. Analysis of qualitative interviews with 30 students reveals that text messaging is the dominant mode of electronic communication amongst students and plays a central role in maintaining their social networks. The text message dialogue amongst students provides emotional and social peer support and facilitates an informal system of interdependent learning in relation to navigating unfamiliar academic and administrative systems. Text messages from university staff, inserted into this dialogue, can enhance the existing peer support and aid students' social integration into university life.

## Introduction

The long distance communication afforded by the Internet and mobile technologies has made contact between individuals more robust. Mobile phone ownership is now 93% among the 15–24 age group in the UK and 92% among the 25–34 age group (Mintel, 2005). For undergraduate students, the mobile phone (and in particular SMS (Short Message Service) text messaging) has become the technology of choice (Longmate & Baber, 2002). SMS is a service present on all mobile phones which allows users to send and receive short text messages, via their keypads, with a maximum of 160 characters.

There are particular reasons why this generation of students, who grew up with mobile phones, has taken to the medium so readily. In adolescence mobile phone use is linked to the development of an identity separate from parental guidance and control because it allows adolescents to converse with their peers irrespective of time or place, without having to go through the parental veto (Ling, 2001). Mobile phones have therefore become heavily implicated in the negotiation of social networks for young people (Taylor & Harper, 2001).

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Other generations have also begun to appreciate the advantages of mobile contact. Because of the immediacy and intimacy of social contact afforded by mobile phones they are viewed as the most personal form of communication (Taylor & Harper, 2002), but their potential contribution to the process of transition to university has received little attention. Whilst students conduct a substantial part of their lives via the mobile phone, universities have pursued Internet-based forms of contact.

As a result we decided to explore the potential of SMS text messaging to enhance the support provided to first-year students. The study had two main aims: the first being to explore the role of text messaging in students' everyday social interactions; and the second being to assess the extent to which carefully designed messages from university staff could help to support students in the early stages of their degree. In carrying out these aims we also evaluated a desktop computer application called *Student Messenger*, which allowed university staff to participate in a text message dialogue with their students via their computers.

# The student experience of transition to university

Becoming a student in Higher Education is a significant social transition which involves integration into the academic and social spheres of the university (Tinto, 1975). University entrants find themselves in an academic environment in which self-direction and independence in learning is emphasised, in contrast to more didactic approaches experienced in secondary education (Kember, 2001). Students initially find this disorientating and motivating themselves to study remains an issue until they have developed a capacity for independent learning (Winn, 2002; Prescott & Simpson, 2004). Much effort has been invested in identifying strategies to help students do this (Sander *et al.*, 2000; Fazey & Fazey, 2001), but the discrepancy between tutors' expectations of independence and first-year students' desire for more support persists (Lowe & Cook, 2003).

The academic difficulties experienced by first-year students stem in part from the common conception of independent learning as an individual activity (Haggis & Pouget, 2002). Leathwood (2001) suggests that the notion of a lone scholar, working in isolation from others, impedes many students' learning and she argues for a greater emphasis on interdependence in learning. Ideas about interdependent learning have been taken up by authors such as McInnis (2001) and Tinto (1997) who advocate approaches which foster collaboration amongst students at an early stage. However, the development of the individual independent learner continues to be the dominant discourse in Higher Education.

Becoming a student entails not only the acquisition of new academic skills but also the construction of a new identity and a sense of belonging (Beder, 1997). The process of renegotiating social support networks, redefining existing relationships with family and friends at home and establishing new friendships is crucial for a successful transition to university, and students who fail to make compatible friends are likely to withdraw (Mackie, 2001).

Students who are successful in developing strong friendships gain social and emotional support. In particular, interdependent networks of support (often formed in students' accommodation) become, in effect, a surrogate family (Wilcox *et al.*, 2005). This support both enhances students' general sense of well-being and belonging and helps them overcome any problems they face (Thomas, 2002).

In recent years the process of integration into university life has been transformed by the emergence of new forms of communication technology. Students' social interactions are now more likely to be mediated by mobile phones, email and Internet-based forms of communication. In the academic sphere, universities are actively encouraging the use of Internet-based forms of communication through their use of managed and virtual learning environments (MLEs and VLEs) (Joint Information Systems Committee, 2004a, b). In the next section we examine the ways in which technological changes have affected social interactions in students' day-to-day lives.

## The shifting context of students' social interaction at university

Studies of students' use of different forms of communication media show that SMS text messaging is used more regularly than email and is the preferred medium for receiving information from the university (Traxler & Riordan, 2003; Griffiths & Hmer, 2004; Stone, 2004). Longmate and Baber (2002) found that text messaging helped to consolidate relationships among students whilst email was rarely used for communication between students.

Building on this evidence, there has been some work exploring the prospect of harnessing text messaging to provide various forms of support for students. Most often text messages are used to provide administrative information (Stone, 2004; Griffiths et al., 2005) but they have also been employed to deliver micro-teaching activities such as quizzes (Griffiths & Hmer, 2004) and to provide academic support such as feedback on assessments and revision tips (Riordan & Traxler, 2003). Such initiatives are positively received by students but some authors express concern about the cost of text messaging, either to the institution (Griffiths & Hmer, 2004) or to students (Stone, 2004), compared with university email systems which are free at the point

More general research into mobile phone use provides evidence of the possible impact of such interventions. Reid and Reid (2004) examined the maintenance of relationships via mobile phone communication, differentiating between 'texters' (those who prefer text messaging over voice calls) and 'talkers' (those who prefer talking on their phone). Texters tended to be lonelier and more socially anxious than talkers but were better able to communicate their 'real self' via text. This suggests that texting may help to facilitate the development of productive relationships for those who would otherwise be socially isolated. For students entering Higher Education new communication technologies afford the possibility for 'perpetual contact' (Katz & Aakhus, 2002) amongst their social networks at university. However, the impact that this may have on the social integration into university life remains largely unexplored in research.

The present study explores ways in which mobile technologies might be enlisted to contribute to supporting first-year students. We first explore the nature and importance of text messaging and other forms of electronic communication technologies in students' everyday lives. We then report the findings of an evaluation of a desktop computer application called Student Messenger, which allows university staff to send and receive text messages from their computers to and from students' mobile phones. We conclude by considering the potential of this kind of application to enhance the support provided for first-year students.

## Methodology

Student Messenger was implemented for the 2004/5 intake of students on the undergraduate programme in Applied Social Science at the University of Brighton. These students study degrees in Criminology, Psychology, Social Policy and Sociology, usually combining two subjects for a joint honours degree. In 2004, 285 students entered the first year. The student population was predominantly female (77%), white (86%) and aged under 21 (75%).

Mobile phone numbers were collected from students during the enrolment process. Students were able to opt out of the project but only a few did so. Three groups of staff were involved in the study: two members of the academic staff acting as personal tutors; a member of the administrative staff; and the department's student support tutor whose role was concerned with supporting first-year students with a view to improving student retention and progression. The *Student Messenger* application was installed on the computers of these staff and students' mobile phone numbers, together with their names and course information, were imported into the application from a spreadsheet. The staff were then able to send text messages to the entire cohort, to individual students or to user-defined groups such as personal tutor groups. Text messages were purchased in bulk, at a cost of 3p per message. In the first year of the project the total cost of texting was £87.

Student Messenger was used to send three types of text message. Messages about organizational matters were sent by the administrator to the year group and by personal tutors to their tutor groups. The student support tutor sent general text messages to the whole group which usually took the form of a greeting, such as 'Happy New Year!', together with a reminder of some aspect of her role. Finally, Student Messenger was sometimes used to contact individual students who could not be reached by email or phone (see examples of text messages sent in Table 1). In this paper we focus on messages sent to groups of students.

Table 1. Examples of text messages sent using Student Messenger

#### Administrative messages

- PD Session this week on Friday in B218 no desks just easy chairs! As decided last PD we are doing week 10 ths wk and wk 9 (presentations) next thursday. DS (Sent by personal tutor)
- Can you contact me to make an appointment for a tutorial (thanks to those who have already done so). Debbie (Sent by personal tutor)
- Reminder! This week is independent study week-check Studentcentral homepage for advice on prep that you need to do this week, best wishes School Office (Sent by administrator)

## General messages to the whole cohort from the student support tutor

- Hope you have had a good first week. Remember if you have any probs, please come and see me or email me on xxx@brighton.ac.uk. Have a good week, Vicky
- Happy New Year! Hope u had a good Xmas. Remember drop in sessions r on Mon + Thurs. Vicky
- Good Luck in your forthcoming exams if u r having any last minute worries, please feel free 2 come and c me. Vicky

#### Individual contacts

- Hi Emily, you can pick your grant up from Registry, Dallington House, Falmer. Also have you changed your mob. no since being at uni? Cheers, Vicky (Sent by student support tutor)
- Tracey, ur PD work has been located but u had forgotten to sign the book, which is y there was some confusion! Take care. Vicky (Sent by tutor)
- Lindsay I am concerned that I have not received your essay for PD, please could you call me or email, xxx@brighton.ac.uk, thanks (Sent by personal tutor)

	Stayed on course	Withdrew (exit interviews)
		,
Age group		
18-20	15	9
21 or over	5	1
Gender		
Female	18	9
Male	2	1

Table 2. Characteristics of interviewees

The timing and nature of the messages were carefully planned. Messages from the support tutor were sent at points in the year that have been identified as critical for student retention, such as after the Christmas vacation and prior to the exam period (McGivney, 1996; Mackie, 2001). A degree of informality is essential for effective communication using this medium (Thurlow, 2003) and those staff who were unfamiliar with texting were provided with brief training. Communication via Student Messenger began in December 2004 and students were invited to take part in qualitative interviews during the subsequent weeks. This was done through notices posted in the department, an email sent to the year group and inviting participation at a lecture on a module taken by all the students. From those who volunteered a sample of 20 students, broadly representative of the student population with respect to age and gender, was selected. In addition, students who withdrew from the degree were routinely asked to take part in an exit interview and some questions relating to the project were added to these interviews. The exit interview sample comprised 10 students (see Table 2 for characteristics of both samples).

Interviews lasted approximately 45 minutes and were tape-recorded and transcribed in full. Questions on the interview guide were grouped into the following sections: introductory questions about students' experience of university; their different uses of communication technologies; and how they felt about the text messages sent via Student Messenger. Exit interviews covered Student Messenger only. Interviews with the main sample took place on the university campus and those with students who withdrew were usually conducted by telephone. All interviewees and university staff referred to in this paper are identified by pseudonyms.

Analysis of the interview data was undertaken using the constant comparative method of grounded theory (Glaser & Strauss, 1967). Potential themes were identified in the literature and informed subsequent analysis. These themes were re-evaluated in light of their ability to explain students' use of different communication media during their transition to university. New themes and concepts emerged from the data and were incorporated into a theoretical description until a point of saturation was met.

## **Findings**

Mobile phones were ubiquitous amongst the students in this study. None of the 285 students was excluded from the study as a result of not owning a mobile phone and all interviewees used their mobile phone daily. Text messaging was far more widely used than voice calls; the mean number of texts sent in an average day was 17 compared with 1.6 voice calls. There was, however, great variation in the frequency of text messaging; the number sent ranged from two to more than 100 per day. In this section we first look at student use of communication media in general before focusing on their views about *Student Messenger*.

## Students' use of communication media

Students used five principal forms of communication: mobile phones for text messaging (used regularly by all 20 members of the main interview sample); mobile phones for voice calls (used regularly by 19); email (17); landline telephones (4); Instant Messenger-type programs (3). Most students were adept at communicating via all these forms of electronic media. For contacting others, text messaging and voice calls from mobile phones were by far the most frequently used whilst, as Longmate and Baber (2002) found, the third most popular technology, email, was much more often used for receiving messages than for sending them.

A number of factors influenced students' choice of communication technologies. They were well aware of costs and used different media accordingly. Many had mobile phone packages which included free text messages and this partly explained the popularity of texting. A preference for text messages over voice calls also arose because of the asynchronous nature of this communication. There were two reasons for this; time to reflect on a reply was sometimes important and, when having to send emotionally sensitive messages, a text message could be used as an 'emotional buffer' making it easier to deliver a sensitive or less palatable response. As Chloe explained,

...if I am like saying I don't want to go somewhere or I am saying no to something I will text, but if I want a chat with someone then I will phone them.

A few students even expressed a distinct dislike for voice calls, preferring the emotional distance of text messaging. Conversely, some liked the feeling of closeness and emotional reciprocity engendered by voice calls:

I prefer hearing somebody's voice, just anybody, because then I know how they are thinking, how they are feeling. (Susannah)

Choice of medium also depended on the nature of the relationship with the person with whom a student was communicating. This delineation of relationship by medium helped students to present appropriate faces to different people; Goffman's notion of 'impression management' (1971) is relevant here. When asked about different uses of communication media, Matt's response was typical:

So [university] staff would be email, but it would only be email to friends if I have lots to say and we haven't been in touch for ages or something like that. Text is just general, 'I will meet you at 7' or 'Oh my god, watch this programme on TV now'.

Students differentiated those relationships they considered to be more formal, such as course tutors. Email predominated in these relationships and the university email system was in fact rarely used for any other purpose. Students' personal email accounts, set up through commercial providers, were used in a less formal fashion when detailed communication was required, for instance with friends and relatives living overseas.

For relationships where there were strong emotional ties but face-to-face contact was not possible, for example family relationships when a student had moved away from home to university, there was a need to hear the other person's voice. The telephone held sway here. Cost considerations meant that some students used a landline for long distance calls, but the majority only used mobile phones.

The role of text messaging in students' everyday lives

A key group of discernible contacts were those pertinent to a student's everyday life, requiring frequent contact and updating and hence generating by far the greatest volume of communication. During term-time these relationships were with university friends. This was where text messaging was most widely used. The nature of communication in these relationships was often seen as instrumental:

...if you are meant to meet them and they are not there or, 'Oh, I left this in my room, if you are coming up to uni can you get it?' (Matt)

These pragmatic arrangements belie the changes in social behaviour that are behind them. The ability to communicate one's presence whilst in transit allows mobile phone users to change arrangements in an ad hoc fashion like never before.

For some mature students' mobile phone use had a different emphasis. It was used to maintain contact with close family, both children and partners. The function of maintaining contact with those involved in day-to-day life remained, however, and its use was equally prolific. The logistical concerns of childcare dominated for those mature students with young children:

If I need childcare or I need someone to pick [my son] up from school if I am running late so, yeah, it is probably childcare related really. (Pamela)

As well as dealing with practical matters, texting in relationships which were intrinsic to everyday life could be a means of providing emotional support, enabling students to maintain a sense of each other's presence:

If we go out we tend to text each other and say, 'Oh, I am in town, I will be back at so and so', just so you know where people are because obviously it is a bit lonely if no one is in the flat. (Rebecca)

What Rebecca says here illustrates how the immediacy of text messaging can provide support in particular circumstances. It was also used in a more general way to maintain social support networks:

A lot of the time it was just 'How are you?' and checking up on them and stuff. (Sylvia)

As well as social support, the interviews revealed the extent to which students rely on friends to make sense of university expectations in relation to academic work. The use of text messaging for this purpose often involved communicating basic factual information such as times of lectures.

...like what time is the lecture? What are we going to do? (Lilly)

Yeah, sometimes it would be for academic reasons like, 'Oh when is that essay due in, what was the title of that again?' (Sylvia)

Although this information is available on the VLE and in course documentation, the dislocation experienced by new students negotiating an unfamiliar academic environment should not be underestimated. Checking with friends for shared understandings of university requirements was an important source of support:

...it is just really to have friends back up how you have interpreted things, you know, how things are meant to be done and how the university wants you working. (Samantha)

A common assumption is made in Higher Education that access to a computer with an Internet connection is the dominant mode of electronic communication for students, but for those we interviewed this was not the case. Current Web-based initiatives to provide students with information and points of contact with the university fail to account for the centrality of text messaging in communication amongst students. In the next section we attempt to further develop our understanding of how an application such as *Student Messenger* might assist students' integration into the social and academic worlds of the university.

Students' views about receiving text messages via Student Messenger

Two types of text message were sent to the entire cohort: general 'greeting' messages and messages about administrative matters. Immediate access to these messages through students' mobile phones was seen as a clear advantage over other Web-based communication methods:

I am terrible at checking my email and some people are terrible at checking [the VLE] for any information like that, so to get these texts straight to your phone, because we have always got our phones on us no matter where we are. (Lynda)

Students also picked up a sense of urgency in messages about administrative matters, which was not apparent in the same information provided on the VLE and in course documents:

Well it has let me know pretty quick and obviously there is a deadline, it has got to be done by next week. But it is good, it has got me sort of doing it, I came in and did it. (Pamela)

The extent of the difficulties new students experience in navigating the academic and organisational structures was revealed by comments on the message to which Pamela refers above. For some recipients this message served to alert them not only to the deadline but also to the fact that the assessment task had to be undertaken.

I think [the text messages] were good because some of my friends were like, 'What is this portfolio?'! So for those that don't read the module handbook they get kept up to date. (Matt)

The other type of text message sent was from the support tutor at pertinent points during the academic year. All interviewees were appreciative of these messages and many said it gave them a sense of belonging to the university. Even though messages were sent out *en masse* they were received as if they were personal communications:

It was nice. I don't know, because university is such a big place, you sometimes feel a bit deindividualised so it is quite nice to know that someone is thinking about you. (Julia)

Stone (2004) found that students shared text messages received from the university. There were instances of this amongst our interviewees, such as a student passing on the support tutor's contact details to a friend from a text message stored on her phone. Receiving the text messages was also sometimes a shared activity:

...we were like, 'Oh, I have got a text from Vicky' and some were like, 'Ooh, I haven't got one', and theirs would then come in. (Joanna)

Two of our interviewees initially had quite a negative response to the messages, unsure about the appropriateness of receiving text messages from the university. These reservations were quickly overcome:

At uni you don't expect to get a text message from your academic staff, but I then was just thinking that this is a modern uni, modern times, and it is good because it makes the personal tutor more accessible and it makes you think that they actually care a bit more. (Sally)

In this section we have seen that text messages sent via Student Messenger were perceived as having the advantages of speed and ease of access. Messages were often acted upon immediately when the same information available from other sources had not prompted action. They were perceived simultaneously as personalised and as something shared with fellow students.

#### Discussion

Our findings show that text messaging is the dominant mode of electronic communication amongst our student sample and that text messages from university staff, if used sensitively and sparingly, are viewed positively by students. We also found that text messaging is integral to students' everyday social relationships and provides peer support in two areas: support to help them negotiate administrative structures and emotional support. However, the interviews also show that, in both areas, during the period of transition to university, students need more support than that which peers are able to provide.

In terms of navigating the formal organization, our findings reveal the degree of uncertainty many new students experience. Whilst there is much discussion about how to help students adapt to the independent mode of learning they encounter at university, what is less often recognised is a process prior to this, of 'learning the system'. Our findings suggest that providing administrative information in induction sessions, in course documentation and on a VLE is not sufficient. Many students lack confidence in their ability to deal with the organisational structures and frequently check with fellow students about mundane matters such as the time of a lecture. Through this informal system of peer support students are, in effect, engaging in interdependent learning, not in relation to learning academic material but to learn the system. Authors such as McInnis (2001) and Tinto (1997) who advocate collaborative learning are concerned primarily with learning of academic content. We agree that interdependent learning in this sphere is of vital importance, but we suggest there is a prior stage in which students need to develop networks of mutual support to assist their learning of academic and administrative systems, and that the text messaging dialogue among students plays a crucial role in facilitating these informal systems of interdependent learning.

How might Student Messenger contribute to this system of support already operating amongst students? Text messages from academic staff about administrative issues can be inserted judiciously into the existing text message dialogue amongst students to provide additional assistance at critical points, such as when their first essay is due to be submitted. A timely reminder with this kind of factual information could support and enhance the system of communication already operating amongst students.

With respect to social and emotional support, those authors who have investigated students' experience of the wider social world of the university have found that strong social networks are crucial for a successful transition to university (Mackie, 2001; Wilcox *et al.*, 2005). Our research supports these findings and shows that text messaging is intrinsic to the maintenance of support networks. As with learning administrative systems, students are already operating systems of peer support.

What is the role of *Student Messenger* in enhancing social support for first-year students? Firstly, messages from the support tutor provided reminders of the formal support systems. Secondly, and perhaps more importantly, we found that careful use of texting was a way of blurring the distinction between the academic and social aspects of university life and strengthening relationships between staff and students, since text messages feel personal in a way that email does not.

#### Conclusion

We began this paper by noting that, despite the popularity of text messaging among undergraduate students, the impact of new communication technologies on academic and social integration during the critical period of transition to university has received little attention. We have shown that students' most prolific use of text messaging is in maintaining relationships intrinsic to everyday life which, during term-time, are usually with their university friends. The seemingly instrumental communications in these relationships provide students with networks of social support and facilitate interdependence in learning the university's academic and administrative systems.

We have demonstrated that an application such as *Student Messenger* can enhance the support provided to students by an academic department during the transition to university. Text messages from staff, inserted into the existing text message dialogue amongst students at critical points during the first year, can inform the dialogue already taking place and aid students' social integration into university life. We suggest that, if universities wish to provide forms of social support which will encourage engagement with their institutions, then an awareness of the social importance of texting and an engagement with this medium is essential. It would be a missed opportunity if universities were to continue to neglect texting as a potential means of supporting first-year students when these very same students are already conducting a substantial part of their lives via this medium.

This study has only been able to outline the 'successful' use of text messaging amongst first-year undergraduates. The limited nature of the exit interviews meant that direct comparison of text messaging practices was not possible for students that left the university versus those that remained. Further research would therefore be needed to explore any relationship that might exist between these practices and student retention.

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#### Notes on contributors

- Dave Harley is a Lecturer in Applied Psychology and IT for Social Scientists at the University of Brighton. His research interests include the social shaping of technology and situated learning as a model for understanding the adoption of communication technologies.
- Sandra Winn was a Principal Lecturer in Social Policy in the School of Applied Social Science at the University of Brighton. Her research interests were in higher education policy and the student experience of Higher Education, including student retention, widening participation and student finance. Sadly, shortly after writing this article, Sandra died. She was a prime mover in establishing this kind of research in the school and translating it into positive improvements for the students. Her loss is deeply felt by all her colleagues and especially those of us who worked closely with her on this study. She will be sadly missed.
- Sarah Pemberton is a Research Officer in the Health and Social Policy Research Centre at the University of Brighton. She has research interests in student retention, student finance and widening participation alongside discipline research interests in domestic violence and the policing of ethnic minorities.
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#### References

- Beder, S. (1997) Addressing the issues of social and academic integration for first year students: a discussion paper (Melbourne, UltiBASE, Royal Melbourne Institute of Technology). Available online at: http:// ultibase.rmit.edu.au/Articles/dec97/beder1.htm (accessed 22 September 2005).
- Fazey, D. & Fazey, J. (2001) The potential for autonomy in learning, Studies in Higher Education, 26(3), 345-361. Glaser, B. G. & Strauss, A. L. (1967) The discovery of grounded theory: strategies for qualitative research (New York, Aldine de Gruvter).
- Goffman, E. (1971) The presentation of self in everyday life (Harmondsworth, Penguin).
- Griffiths, L. & Hmer, A. (2004) U R L8 4 ur exam: )—students' opinions towards receiving timely information via SMS, paper presented at the 11th International Conference of the Association for Learning Technology, University of Exeter, 14-16 September. Available online at: http://www.alt.ac.uk/altc2004/timetable/files/ 133/alt-c-2004-v1-LGAH%20.ppt (accessed 5 January 2006).
- Griffiths, L., James, M. & Whittle, S. (2005) Campus-wide implementation of SMS text services within a Blackboard VLE, paper presented at the 12th International Conference of the Association for Learning Technology, University of Manchester, 6–8 September. Available online at: http://www.alt.ac.uk/altc2005/ timetable/files/468/alt-c%202005%20sms-ST.ppt (accessed 3 January 2006).
- Haggis, T. & Pouget, M. (2002) Trying to be motivated: perspectives on learning from younger students accessing higher education, Teaching in Higher Education, 7(3), 323–336.
- Joint Information Systems Committee (2004a) Creating an MLE. Available online at: http://www.jiscinfonet.ac.uk/InfoKits/creating-an-mle (accessed 23 June 2004).
- Joint Information Systems Committee (2004b) JISC Strategy 2004-06. Available online at: http:// www.jisc.ac.uk/index.cfm?name=strategy\_jisc\_04\_06 (accessed 20 June 2004).
- Katz, J. E. & Aakhus, M. (2002) Perpetual contact: mobile communication, private talk, public performance (Cambridge, Cambridge University Press).
- Kember, D. (2001) Beliefs about knowledge and the process of teaching and learning as a factor in adjusting to study in higher education, Studies in Higher Education, 26(2), 205–221.

- Leathwood, C. (2001) The road to independence? Policy, pedagogy and 'the independent learner' in higher education, paper presented at the 31st SCUTREA Conference, London, 3–5 July. Available online at: http://www.leeds.ac.uk/educol/documents/00002491.htm (accessed 22 November 2005).
- Ling, R. (2001) Adolescent girls and young adult men: two sub-cultures of the mobile telephone (Kjeller, Telenor Research and Development).
- Longmate, E. & Baber, C. (2002) A comparison of text messaging and email support for digital communities: a case study, in: X. Faulkner, J. Finlay & F. Detienne (Eds) *People and computers XVI—memorable yet invisible. Proceedings of HCI 2002* (London, Springer-Verlag), 69–88.
- Lowe, H. & Cook, A. (2003) Mind the gap: are students prepared for higher education?, Journal of Further and Higher Education, 27(1), 53–76.
- Mackie, S. (2001) Jumping the hurdles—undergraduate student withdrawal behaviour, *Innovations in Education and Training International*, 38(3), 265–275.
- McGivney, V. (1996) Staying or leaving the course, Adults Learning, 7(6), 133–135.
- McInnis, C. (2001) Signs of disengagement? The changing undergraduate experience in Australian universities, Inaugural lecture, University of Melbourne, 13 August. Available online at: http://www.cshe.unimelb.edu.au/downloads/InaugLec23\_8\_01.pdf (accessed 6 October 2005).
- Mintel (2005) Mobile phones and network providers—UK—April 2005 UK essentials, UK market intelligence (London, Mintel Group). Available online at: http://reports.mintel.com/sinatra/reports/my\_reports/display/id=114641&anchor=atom/display/id=159502/display/id=114641 (accessed 18 October 2005).
- Prescott, A. & Simpson, E. (2004) Effective student motivation commences with resolving 'dissatisfiers', *Journal of Further and Higher Education*, 28(3), 248–259.
- Reid, D. & Reid, F. (2004) *Insights into the social and psychological effects of SMS text messaging*. Available online at: http://www.160characters.org/documents/SocialEffectsOfTextMessaging.pdf (accessed 10 March 2005).
- Riordan, B. & Traxler, J. (2003) Supporting computing students at risk using blended technologies (Coleraine, University of Ulster, LTSN Centre for Information and Computer Sciences). Available online at: http://www.ics.ltsn.ac.uk/pub/conf2003/supporting\_computing\_students.htm (accessed 10 June 2004).
- Sander, P., Stevenson, K., King, M. & Coates, D. (2002) University students' expectations of teaching, *Studies in Higher Education*, 25(3), 309–323.
- Stone, A. (2004) Mobile scaffolding: an experiment in using SMS to support first year university students, paper presented at the 4th IEEE International Conference on Advanced Learning Technologies, University of Joensuu, 30 August to 1 September. Available online at: http://lttf.ieee.org/icalt2004/ppt/148.ppt (accessed 20 November 2005).
- Taylor, A. S. & Harper, R. (2001) Talking 'activity': young people and mobile phones, paper presented at the *CHI 2001 Mobile Communications Workshop*, Seattle, WA, 1–2 April. Available online at: http://www.cs.colorado.edu/~palen/chi\_workshop/papers/TaylorHarper.pdf (accessed 13 October 2005).
- Taylor, A. S. & Harper, R. (2002) Age-old practices in the 'New World': a study of gift-giving between teenage mobile phone users. Available online at: http://research.microsoft.com/~ast/files/CHI\_2002.pdf (accessed 19 December 2005).
- Thomas, L. (2002) Student retention in higher education: the role of institutional habitus, *Journal of Education Policy*, 17(4), 423–442.
- Thurlow, C. (2003). Generation Txt? The sociolinguistics of young people's text messaging, *Discourse Analysis Online*, 1(1). Available online at: http://extra.shu.ac.uk/daol/articles/v1/n1/a3/thurlow2002003-paper.html (accessed 12 January 2006).
- Tinto, V. (1975) Dropout from higher education: a theoretical synthesis of recent research, *Review of Education Research*, 45, 89–125.
- Tinto, V. (1997) Classrooms as communities: exploring the educational character of student persistence, *Journal of Higher Education*, 68(6), 599–623.
- Traxler, J. & Riordan, B. (2003) Evaluating the effectiveness of retention strategies using SMS, WAP and WWW student support, paper presented at the 4th Annual LTSN-ICS Conference, National University of Ireland, Galway, 26–28 August. Available online at: http://www.ics.ltsn.ac.uk/pub/conf2003/John%20Traxler.pdf (accessed 3 January 2005).

- Wilcox, P., Winn, S. & Fyvie-Gauld, M. (2005) 'It was nothing to do with the university, it was just the people': the role of social support in the first year experience of university, Studies in Higher Education, 30(6), 707-722.
- Winn, S. (2002) Student motivation: a socio-economic perspective, Studies in Higher Education, 27(4), 445-457.

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