

Mobile Means for Maximising Student/Tutor Interactions

This article examines the degree to which first year university students use mobile telephony to stay in contact with their lecturers and tutors. Survey data from two cohorts of first year students are discussed. The special relationship students have with their mobile phones provides opportunities for extending the use made of the technology in educational settings, not only to stay in contact with students, but also to promote their engagement in their studies. 'The interplay between the old and the new environments creates many problems and confusions. The main obstacle to a clear understanding of the effects of the new media is our deeply embedded habit of regarding all phenomena from a fixed point of view'¹.

ubiquitous 'umbilical cord' by incorporating them into classroom activities⁶.

This article relates the experiences of one lecturer/tutor using mobile phone texting to stay in contact with her students. Survey data about student use of text messaging for academic purposes from two cohorts of first year students are discussed. The article also highlights some of the implications for using mobile telephony to provide connection for first year students in higher education. It examines these first year student experiences by exploring firstly the process of integration into university life, and secondly the ways in which mobile phone technology plays a key role in achieving a successful transition into the first year of university. It concludes with analysis of the key findings and some conclusions from the study.

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Introduction

Prensky² uses the term 'digital natives' to describe the millennial generation students, many of whom have commenced their first year in higher education. These students grew up with the 'twitch-speed of video games and MTV' and are completely at home with the instantaneity of hypertext, downloaded music, phones in their pockets, a library on their laptops, beamed messages and instant messaging. They've been networked most or all of their lives². Strange³ believes that this generational cohort has been shaped by these technological developments such that their collective credo is 'we connect!'

By and large, there is a sharp contrast between the comfort that these students enjoy with technology and the comfort levels of their teachers⁴. Although most higher education institutions are offering courses on-line, Prensky⁵ argues that there is still a great deal of resistance to technology and most of what is being done with technology falls into the category of 'doing old things in new ways'. Mobile phones are mostly regarded as disruptive devices by many lecturers and tutors, and students are asked to turn them off during classes. However, some lecturers are exploiting the students' devotion to the

Context for the Study

The transition to university, whether from school, the workplace or home, presents commencing students with several challenges. Krause and Duchesne⁷ argued that when placed in a new social context such as the university environment, an individual is faced with concomitant physical, emotional and intellectual demands. First year students in higher education often mention the differences between the degree of support they received at school and the support they receive at university where they are expected to rely more heavily on their own efforts⁸. However, it is not only the school leavers who are vulnerable to instructional isolation as a result of this approach. Faced with lecturers and tutors who are high on information but lower on teaching and interactive skills, in an environment which often favours mass teaching methods, less confident students are less likely to succeed in their first terms in higher education without support.

The experiences students have in their first year at university have been recognised as especially significant and are regarded as important factors in student success in higher education. It is also the stage at which most attrition occurs. In fact, Tinto⁹

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identified the initial six weeks of the first term as the time of greatest vulnerability for students to feel marginalised, triggering their withdrawal from university study. He argued that universities were comprised of distinct social and academic systems, and integration into these systems was central to student commitment to persist with university study. This integration has been expressed as a 'sense of belonging'.

A student's sense of belonging was investigated among first year university students by Hoffman et al¹⁰. They identified the following five factors as contributors to a student's sense of belonging at university:

- perceived peer support;
- perceived faculty support/comfort;
- perceived classroom comfort;
- perceived isolation;
- empathetic faculty understanding.

Three of these factors (perceived faculty support/comfort, perceived isolation, and empathetic faculty understanding) are directly associated with the relationship between the student and academic staff. Other research into retention of first year university students has also pointed to the provision of frequent and meaningful interaction between students and staff as pivotal in making students feel valued, leading to deeper and more meaningful engagement with their studies^{11, 12}. In the USA, the National Survey of Student Engagement (NSSE) has collected data on actual student learning and effective education practices from undergraduate students annually since 1999. The role of student interaction with faculty members is acknowledged and the student/faculty interaction is included among the benchmark measures for this annual survey¹¹.

From their study into the impact of faculty attitudes and behaviours on student retention, Lundquist et al¹² recommended three strategies for a faculty:

- be supportive of students' needs;
- return phone calls and e-mails in a timely manner;
- be approachable.

Thus, there seems to be support for the premise that the transition to higher education can be enhanced by providing more flexible means of communication that assist in the building of a student/faculty relationship that fosters learning through empathy, appreciation of the student's diversity and personal qualities, and encourages new learning approaches that are in line with success in tertiary education.



Technology and the Student/Tutor Relationship

Universities have adopted flexible learning approaches to provide much of the information and interaction which students once experienced on campus with any time, anywhere access via a computer and modem. The use of e-mail and discussion forums embedded in learning management is one mechanism to enhance peer-to-peer communication and exchanges between staff and students on and off campus¹³. Krause and Duchesne⁷ reported that students valued personal contact with tutors and lecturers and that being able to contact and interact with academic staff emerged as a critical theme of their study of student use of learning technologies.

Direct personal contact with academic staff can also be achieved through use of mobile phones. However, providing a mobile phone number to students is a highly personal decision made by academic staff. Nevertheless, a mobile phone has become synonymous with an office phone for casual teaching staff (i.e. teaching staff without permanent positions) as they spend much of their time in transit between various workplaces. Additionally, casual teaching staff mostly have to share office accommodation and telephones with others when on campus. For obvious reasons, the home phone is regarded as off limits. For traditional academics (i.e. those who hold more traditional views of the student/lecturer relationship), handing out a mobile phone number to students may seem like a transgression of student/lecturer boundaries. For the most part, these traditional academics are on permanent contracts with their own offices and telephones and therefore do not see the

need to adopt mobile telephony as a medium of communication with students. It is interesting to note here that data exists to show that while nearly 40% of students use text messaging by mobile phone to contact other students¹⁴, the extent of text messaging by students to communicate with academic staff is not known.

Text Messaging and the Student

Text messaging is an example of a student-centred, personal approach to communication – where connection and communication is viewed from a student's point of view. Text messaging is particularly suited to the 18–24 year age group, who are often the most vulnerable to isolation and other difficulties associated with the transition to university. Young people have taken to communicating by text messaging or SMS that allows users to send and receive short messages from handheld, digital mobile phones or from a computer to a mobile phone, giving almost instant access. These young people are adapting and inventing language to accommodate the 160-character limit with the result that the messages are mostly abbreviations, acronyms or even combinations of letters

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and numbers, such as 'L8', for 'late'. As a consequence, the language is informal and the messages are mostly peer to peer¹⁵. Texting is used as a method of staying in touch, organising social occasions, and generally managing a social life. More than eight billion text messages were sent in the 2005/2006 financial year in Australia¹⁶. Most of these text messages were sent by users in the 16–24 age group. Text messaging works for students because it is a relatively inexpensive way of delivering important short messages. It is also private and handy. Young SMS users have moved away from the idea of a mobile phone as either a luxury item, or something to use in emergencies. It has become an essential tool for managing one's life and one's social calendar. Few will leave home without it, and many never switch it off¹⁵. Mobile phones provide the effect of having the 'absent presence'¹⁷, making their owners feel connected to those they know and with whom they have exchanged numbers, thereby creating a community of mutually connected people¹⁸. Text messaging has also been heralded as a major break-through for communication among the deaf and between them and hearing people¹⁹, as it allows deaf people to use mobile phones to send and receive text messages. Van Dijk²⁰ believes that the adoption of mobile technology has been more widely spread than other ICT across the social landscape, mainly as a result of its affordability and portability.

Methodology

The aims of this study were twofold. The first aim was to assess the degree to which the students were satisfied with the interaction and communication provided with the lecturer outside class time. Secondly, and more broadly, the aim was to establish the degree to which students used their mobile phones for educational purposes.

First year students enrolled in an 'Introduction to Counselling' unit at a university on the Eastern seaboard of Australia were surveyed at the end of the first term in 2005 and 2006. The survey was part of a quality assurance measure to establish the degree to which the students had been able to contact and interact with their lecturer via text messaging, mobile phone and e-mail during their first term at university. At the start of the term the lecturer gave her mobile phone number to all students encouraging them to send her text messages or to call if they needed

information or guidance. She also gave them her e-mail address.

The surveys were distributed at the end of class in the second to last tutorials of the term. Students took approximately ten minutes to complete the pencil and paper survey that comprised open-ended questions and closed Likert-type items. The survey was anonymous with students asked to indicate gender and age within five different age groupings. The survey was voluntary. Over and above the questions regarding the degree and manner of their communication with the lecturer for this unit and for educational purposes in general, there were questions about their preferences for talking or texting and their views on the benefits and problems of text messaging. Additionally, students were asked how long they had owned a mobile phone and who was responsible for paying for their calls.

Quantitative data was analysed using SPSS software. Only surveys with sufficient relevant data were used for analysis.

Key Findings

Across the two years, 54% of the students ($n = 38$) participated in the survey. Tables 1–3 show more details of the sample. Responses to gender were sparse, and were, therefore, not included in the analysis. The participants appeared to fall into two major age groups – those aged between 18 and 24 and those aged over 40.

The most common reason for contacting the lecturer/tutor was in connection with assignments. The students also demonstrated their respect for the lecturer by communicating that they would be late or miss a class. When asked what they hoped to achieve by their communication

Table 1 Participants by age group and year of study

Age group	2005	2006	Total
Enrolled	43	27	70
18–24	10	3	13
25–30	0	20	1
31–35	3	0	3
36–40	1	3	4
40 plus	10	6	16
Missing	1	0	1
Total	25	13	38

Table 2 Method of contact with lecturer/tutor by age group

Age group	Text	e-mail	Mobile phone	Total
18–24	6	4	5	15
25–30	0	0	0	0
31–35	1	3	1	5
36–40	1	2	1	4
40 plus	6	5	9	20
Total	14	14	16	–

Table 3 Nature of communication with lecturer/tutor by age group

Age group	Needed help with assignment	Missed a lecture and needed information	To advise about lateness for or missing class	Needed an extension for assignment
18-24	7	1	4	1
25-30	0	0	0	0
31-35	2	0	0	0
36-40	2	1	1	0
40 plus	5	4	6	1
Total	16	6	11	2



with the lecturer/tutor, the most frequent response was to receive guidance and reassurance about an assignment followed by a desire to be courteous in terms of letting the lecturer know that they would miss the lecture or class.

Students were very clear that it was not common practice to send text messages to their lecturers or tutors – 74% of the students said this, stating that they had not been invited to do so. The most common method of communicating with their lecturers or tutors was via e-mail (36%), followed by phone calls (20%) with the remaining students making contact before, during or after lectures or classes.

The majority of the participants had owned mobile phones for more than three years, with only 25% of the students having owned their phones for less than three years. The participants also paid for their own phone calls, with only two students stating that their partners paid for calls, and a further two students stating that their mobile phone expenses were met by the companies that employed them. Nearly 48% of the participants said they never left home without their mobile phones. Students who did leave home without their mobile phones tended to fall into the 40 plus age groups where 26% admitted to leaving home without their mobile phones. The most common reason given for leaving home without the mobile phone was to enjoy peace and quiet and not being contactable for a specific period of time.

Younger students reported a preference for texting rather than talking on the mobile phone. The participants tended to use texting mainly to stay in contact with their friends and fellow university students, while they mostly spoke to their parents rather than sending text messages. Students explained that they mostly did not allow others to read the text messages they received as they regarded them as personal.

However, if they were to allow someone else to read the text messages, it was most likely to be a partner.

Across all age groups, participants reported that they felt best able to express their feelings in face-to-face encounters. The reason for this was that they felt best able to read all the signals, including the body language, in such encounters; 71% of the respondents claimed that they never said anything in a text message that they would not feel comfortable saying face-to-face or in voice calls.

There were differences in use between the age groups. The youngest participants were more likely than other participants to use text messaging to wish someone a happy birthday, make social and family arrangements, cancel social and family arrangements, flirt or argue. However, all participants agreed that it was not appropriate to end a relationship with someone via a text message. Participants believed that the most important benefit of sending text messages was that it was a quick and easy method of communicating, followed by the fact that it was also cheap to do so. The biggest problem with sending text messages, according to the participants, was the risk of the messages being misinterpreted. Participants in the over-40 group felt that the lack of immediate response was the biggest problem with sending text messages. Younger groups did not mention this lack of response as a problem. It was not clear who were not responding to the oldest group, but, as a few mentioned that it was a convenient way of staying in contact with their children, it is likely that it is the children who are not responding quickly enough.

Powerful Potential of the Mobile Phone

Despite their affordability and portability, mobile phones have the capacity to provide a range of computer-like functions. Prensky²¹ reported that, except for the USA and Canada, mobile phones (or cell phones as they are called in the USA) outnumber personal computers in use. Due to the high mobile phone market penetration among students, innovative educators are trialling mobile learning (or m-learning) projects, which use mobile phone devices to provide students with a wide range of learning opportunities. M-learning is a term used for the delivery of content and learning interactions via mobile devices²². The use of mobile devices allows learning to occur independently, without needing either fixed

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time or fixed space. Community programmes are also exploring ways to use mobile phone technology to engage young people in literacy and numeracy learning (TAFE NSW, MOBILEarn Project, Nokia's Bridgeit Programme) and the Australian Defence Force provides first aid training via mobile phones²³. An art teacher at a high school in Scotland has devised a system that allows students to use their mobile phones to do their homework²⁴. The system is called 'infofone' and it is an information delivery system which supports students' studies, using the same technology that allows people to download ring tones or retrieve the latest weather or sports news. In New Zealand, a university lecturer has created a mobile texting platform to deliver course content and study tips to his tertiary students²². The system known as 'StudyTXT' was originally designed to help his students memorise muscle groups by reading messages on their mobile phones. While they were unhappy sitting at the bus stop with old fashion flashcards, they were all perfectly happy to do the work by reading messages on their mobile phones.

Why TXT not Voice?

There are several good reasons for texting rather than talking on the mobile phone. In previous studies of text messaging with students, texting was found to be efficient and time saving for both students and academic staff²⁵. Further, messages can be stored and dealt with all in one session. Text messages can be received with minimal disruption, unlike mobile phone calls. It is also cheaper. It costs nothing to read text messages, whereas accessing the message bank for voice messages incurs the cost of a phone call. Additionally, and importantly, for classroom use, it is possible to compose group text messages for the class to alert students to materials on the Web site. Text messaging brings with it comfort of the familiar and allows an informality and

intimacy, more commonly afforded in face-to-face encounters, to be reproduced between physically remote interlocutors²⁶.

Conclusions

The study reports on two surveys done in a single unit on one campus of a single institution and while it attempts to capture data from two successive cohorts, the sample sizes are small. Thus, although it is not possible to generalise the findings to larger student populations, it does provide some interesting insights into student and tutor behaviours with regard to the use of texting that warrant further study.

For example, it was clear that it was not common practice for students to send text messages to their lecturers. It was also clear that despite having access to the lecturer's mobile phone number, students did not misuse this privilege. Indeed, students demonstrated their respect for the lecturer by sending apologies for lateness and missed classes. They appreciated the ability to contact the lecturer and as Gergen¹⁷ and Vincent¹⁸ indicated, felt connected by virtue of this link, even when they chose not to use it.

The mobile phone provided a means of connection and control for the students. While this approach might seem like 'constant availability', with properly negotiated ground rules, students understand that it is 'contactability' that is offered, not '24/7 instant access'. One does have the facility to switch off the device at certain times. Further, due to the limited character allowance, messages tend to be context specific, to the point and mostly short – unlike some e-mail correspondence. Thus this method of communication also provides the lecturer/tutor with both connection and control. So while students may not have the lecturer 'on tap', they do not feel abandoned and know that their issues will receive attention. With better and more communication between student and tutor, tutors are able to pick up on small problems and deal with them before they escalate out of control. This availability builds trust between the student and tutor, often giving the vulnerable first year student the confidence to reach out and ask for help. The method feels comfortable and informal to these regular texters, and is private and immediate. In fact, it addresses at least three of the five factors Hoffman et al¹⁰ believe are associated with a 'sense of belonging', and theorised by Tinto⁹ to be a measure of a student's integration into the university community. It

can be seen as providing 'perceived faculty support/comfort, empathetic faculty understanding' and countering 'perceived isolation'.

Communication is regarded as a means of influencing learning motivations. As discussed, frequent and meaningful interaction between students and academic staff leads students to deeper and more meaningful engagement with their studies. Additionally, such student/staff communication provides students with a sense of belonging to the university community^{11, 12}. Contemporary university life in Australia is a challenge to the provision of community because of the mobility of students, the realities of the teaching portfolios of academics, and other issues of time and space. Using texting to communicate with tutors and other students is a way of providing connection and community in today's on-campus/off-campus university environment where both students and tutors are likely to spend fewer hours on campus and are also more likely to lead busy, complex lives in which work, family and social interactions make demands on their time. Students are managing the rest of their lives with the aid of mobile phones and text messaging – being able to manage their university lives in the same fashion seems to make sense.

What also makes sense is to watch the ways in which students continue to evolve their use of this technology. This study has confirmed the effectiveness of text messaging as a way of providing support for students using the technology they use everyday.

These findings suggest that the next logical step for the future would be the use of text messaging by tutors and students to engage students with their studies through the provision of m-learning opportunities. This will require collaboration between students and educational institutions and a concerted effort on the part of educators to consider the phenomena from more points of view. We also need to remember that learning is a very personal act, facilitated by learning experiences that are relevant, reliable and engaging²⁷. It is also not something that can be guaranteed by technology in and of itself.

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