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Cutting the cloth to fit new needs and communication preferences

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Abstract
Improving communication with first year students can be at the heart of enabling them to experience a successful transition to university, to prosper and succeed. They need encouragement to engage with the social, institutional and academic cogs which operate together to drive universities and teaching and learning. However, in large universities, students can find transition difficult because each cog seems to work independently of the others. In addition, there is dissonance between the transmissive nature of communication at university compared to the socially interactive nature of Web 2.0 approaches, such as wikis and blogs, with which an increasing number of our Net Generation students have become accustomed. At the University of South Australia, academic staff in Learning Connection are exploring the potential of Web 2.0 approaches to actively engage with our more digitally-savvy students and enhance their first year experience. This paper will discuss early outcomes of several initiatives involving communication with first year students, academic and professional staff and new technologies.

Introduction

Engaging first year students
First year students have traditionally been the bread-and-butter of learning advisory work in universities, with increasing emphasis on the first year experience. This is because student transition, retention and success have been defined as key performance indicators of quality in Australian universities (Australian Government 2007). Pascarella and Terenzini draw on results of the American National Survey of Student Engagement (NSSE) to identify five key elements essential to student persistence and success: ‘academic challenge, active and collaborative learning, student faculty interaction, enriching educational experiences, and supportive campus environments’ (cited in Kuh 2007, p. 3). Krause, Hartley, James and McInnis (2005), in referring to a decade of national surveys of Australian first year students, found that undergraduates engaged with peers, academics and the institution as a whole, are most likely to express satisfaction with their first year experience, achieve more academically and persist with university study. Their level of engagement is determined by the amount of time, energy and resources they commit to university (Krause, Hartley, James & McInnis 2005, p. 41).

Ensuring that students have multiple and diverse opportunities to engage with their university is a major challenge.
Commencing students can find university complex and confusing as they try to come to terms with its social, academic and institutional dimensions (Duff, Quinn, Johnston & Lock 2007).

The sector’s shift to using technology to provide information and resources online has achieved new and valued outreach. In fact, many staff found this shift from print to author-controlled online environments (Web 1.0) relatively easy because the new approaches model familiar and ‘traditional, unilateral publication formats’ where readers are ‘passive consumer[s] of information’ (Brown 2007, p. 1). Now students are undergoing a shift in their communication preferences, reflecting a broadly based social change which impacts on everyday literacy practices. This challenges us to find new and relevant ways to engage with students.

**The changing needs and preferences of our students**

The widespread use of social software marks the shift in social practice. The internet is just one of the communication tools, including mobile phones and face-to-face communication, integral to students’ lives. A growing proportion of commencing students, characterised by Prensky (2001) as ‘digital natives’, have grown up with the Internet, online games, email, instant messaging and other social possibilities the internet offers. The new discourses of these tools reflect the power of literacy practices to affect social identity and determine one’s position in that society (Gee 1996, pp. 128-129). Indeed the adoption of new communicative practices is so pervasive, that inclusion and success in this ‘new’ society is premised on students functioning effectively within it (Kalantzis, Cope & Fehring 2002). University staff are best able to signify acceptance and valuing of their students’ everyday literacy practices by demonstrating an understanding of the literacies that underpin students’ lives (Kinzer 2003, p. 7). Effective use of internet technology such as Web 2.0 may enable staff to tap into the ‘social’ aspect of student lives to foster social inclusion and engagement. This, according to Cluett and Skene (2007, p. 3), is especially so where students are stressed and busy, introverted or have some difficulties with language. They further emphasise how modes of technology which are relevant to students can foster ‘a sense of belonging and purpose on campus’.

We also need to be aware that the level of student familiarity with social software varies widely. Surveys at the Universities of Melbourne and Western Australia reveal that many of the Net Generation use blogs ‘for sharing knowledge and resources and encouraging debate’ (Crowe & Tonkin 2006 cited in Cluett & Skene 2007, p. 10). An informal single campus survey at the University of South Australia (UniSA) seeking to gauge social software usage among incoming students, provides contrasting data suggesting that only 20% of incoming students have had experience with blogs and/or wikis. This compares with 58% with experience of instant messaging (Duff unpublished 2007). While familiarity with blogs relates to a relatively small proportion of students, blogs are proliferating rapidly through the web, and are now incorporated into the websites of large media organisations such as ninemsn and the ABC. Further, the rate of student experience with asynchronous discussion has grown to 45% in 2007 from 22% in 2005–2006 indicating increased usage of interactive web media (Author 2, unpublished 2006).

While this data indicates an accelerated rate of uptake in social software, usage can vary. Cluett and Skene (2007) acknowledge that their student population at the University of Western Australia are young and relatively privileged, as is Melbourne University’s, so the findings may link to students’ socio-economic status and age. There are also striking differences in blog or asynchronous discussion usage between authors, contributors and lurkers (Crystal 2006). Nielsen (2006), an authority on web usability, states that 90% of visitors to websites are lurkers (with a further 9% providing only scant or superficial input).
This leaves only 1% of web visitors making quality contributions to online communities such as discussion forums.

Examples of social-software-in-action remain little documented due to their experimental nature and the more interactive technologies remain largely unexamined in the literature (Cluett & Skene 2007). However, there are examples of the higher education sector exploring the social potential of new technologies in fostering engagement. Australian National University’s Skills Soup podcasts or First_year@UniMelb online journal exemplify such innovation (Boin & Rhoden 2007).

This paper examines several initiatives designed to improve student transition, retention and success at one campus in a multi-campus Australian university which values online communication. The setting is a satellite campus offering limited social-recreational opportunities. Many of its students are enrolled in programs requiring high contact time (Duff et al. 2007). Students are drawn from the adjacent metropolitan area, country, interstate and off-shore. While the metropolitan students often have well-developed social networks, the others can experience difficulty navigating their new learning and living environments. The initiatives described here are driven by Learning Advisers and explore the application of social software for purposeful, informal student outreach.

Understanding and using Web 2.0

The term Web 2.0 describes the more active, socially oriented software including ‘social software’ such as blogs, wikis, photo sharing, and the social book-marking programs (Spivack 2007). Web 2.0 provides a rich and diverse functionality by allowing contributors to join and shape various discourse communities. Following Web 1.0’s transmissive nature, social software offers changes in service and orientation, not simply changes in software (O’Reilly 2005). Blogs, for example, are web-based diaries using publicly available software in which authors share important events. The appeal of blogs lies in features such as graphics, video and the ability to make comments. Authors are increasingly able to track and profile their users by number, time and place through statistics tracking software such as Feedburner. It is user friendly so new users can learn through experimentation and do not need extensive training.

As educators we need to understand and operate in the world our students inhabit. We need to find ways to maximise our digital literacy and exploit the potentials of the ‘new milieu’ (Jones-Kavalier & Flannigan 2006, p. 1). Web 2.0’s social interaction promises to enhance the teaching and learning environment, particularly when used in specific contexts or for specific functions e.g. within a course, or with a particular audiences. Crystal (2006) points out that most internet interactions serve individuals and communities. Web 2.0’s ability to build community enables students and staff to create together

...ways of talking, listening, (often too reading and writing), acting, interacting, believing, valuing, and using tools and objects, in particular settings at specific times, so as to display and recognize a particular social identity (Gee 1996, p. 128).

It encourages the informal discourse known as ‘written speech’ or ‘Netspeak’ (Crystal 2006). This allows an intimacy in register not present in more formal publications for students. Multiple voices including student contributions, interactive quizzes and graphics engage students at course level and develop the communicative competencies needed for membership of various social, business and educational spheres (Gee 1996).
The argument for more widespread use of social software in teaching is gaining strength. Cluett and Skene (2007) recommend using these technologies ‘to encourage critical thinking, team work, and creativity...as well as self-paced learning’ (p.7). Learners can shift from passive receivers to active contributors to their own learning thereby developing deep learning approaches (Biggs 1987). The asynchronous nature of online interaction allows reflection, engagement and peer interaction ‘not possible in face to face teaching’ (Cluett & Skene 2007, p. 7). This interaction is ‘central to the learning paradigm’ (Brown 2007, p. 1).

The campus context

The Mawson Lakes campus of UniSA is the main site for programs offered by the Division of Information Technology, Engineering and the Environment (ITEE). The undergraduate students are mostly young male school-leavers studying computer science or engineering. The postgraduates are typically international students studying coursework Masters degrees.

The campus is about 10km from the Adelaide CBD in a newly developed satellite suburb. Most students travel to campus daily but live and work elsewhere. Local opportunities for social interaction are limited, particularly since the introduction of voluntary student unionism in 2006. Many students ‘struggle to manage the multiple obligations of family and work that pull them away from the world of the college’ (Tinto, & Goodsell-Love 1993, p. 2). Retention and success are acknowledged issues, and the past two years has seen an emphasis on building community and supporting commencing students through a First Year Experience Project led by the ITEE Dean Teaching and Learning in collaboration with staff in Learning Connection (Smith 2006).

The Mawson Lakes student population includes many first generation, equity and international students. For many, academic success is the pathway to lifelong social and economic success. Their expectations of university education probably conform with Laming’s findings that students anticipate university will be ‘an intellectually stimulating life-altering experience’ (Laming 2007, p. 7).

The teaching and learning environment focuses on online delivery of teaching and administrative resources (Hicks & George 2001). Many services are provided through Learning Connection, part of an autonomous university-wide learning and teaching support unit. Learning Connection is staffed by academic staff (Learning Advisers and Academic Development staff) and professional staff (Counsellors, Disability Advisers, International Student Officers, Online Advisers) working collaboratively with other teaching and professional staff to optimise student learning. They have ‘shared responsibility for educational quality and student success’, identified in the American DEEP project as one of six effective educational practices found in outstanding universities (Kuh 2007).

At Learning Connection, Learning Advisers and Academic Developers identified a need for innovation in services to students, including orientation. At Mawson Lakes there are fewer student appointments with academic and professional staff and lower attendance at workshops, than on other campuses with different demographics e.g. more females and more services-oriented student populations. Staff, recognising that computing and engineering students are usually technologically-savvy, explored alternative online pathways to build local learning communities (Salaway, Katz, Caruso, Kvavik & Nelson 2006).

Four examples, representing different uses of social technology to support first year students are presented. These are the Computer and Information Science (CIS) Quest (student orientation using blogging); the Learning Connection@ Mawson Lakes blog; the Writing in
the Sciences blog and Talking about exams (an asynchronous exam discussion board). All required considerable effort to combine the independently-operating social, academic and institutional areas of the university (Duff et al. 2007). Care was given to designing for the Net Generation—maximising the use of interactivity, hypertext linking, graphics and other elements characteristic of social software.

While the technologies described here are distinctive in nature, they are common in purpose, cross promote and ‘speak’ to each other. In each example, a description of how the change process was augmented by teaching and learning staff at Learning Connection is provided. As this is a work in progress continuing work will be done on formally evaluating the various initiatives.

Web 2.0 examples

CIS Quest
The 2007 Quest was a new approach to student orientation, piloted in the School of Computer and Information Science. It was underpinned by the need to improve student engagement with each other (the social); their school (institutional) and their learning (academic) starting with orientation week.

The Quest involved a mentor-led group treasure hunt where the students were put into program groups and instructed to find key pieces of information such as:

- On a computer go to your myUniSA and find (online) the location of one lecture or tutorial (one from each group member). These will be linked to your course homepages.

Questions were designed to familiarise the students with the nomenclature of University life (‘Course homepages’; ‘myUniSA’; lecture; tutorial and so forth).

In the course of their Quest, students investigated a topic relevant to computing science, met staff, explored research labs, and found key sites on campus. Each group was required to produce a collaborative blog of their experiences including their informed response to their topic. These blogs became the ‘creative jewel in the crown’ of the Quest (Duff et al. 2007).

Groups were encouraged to use graphics to illustrate their experience in their blogs. They could bring along a digital camera or take photos with their mobile phones or use a selection of electronic images. These—and clues and instructions—were linked to a discussion board in one of their foundation courses.

Students engaged in the Quest over three days in orientation week (with a day in between for reflection). Each group was led by a student mentor and began posting their blogs at the end of day one. By day three, all groups had shared their blogs which were awarded prizes on the basis of their creativity and academic depth.

The project was led by the Dean Teaching and Learning, an Academic Developer and Learning Advisers. Others were involved in the planning and writing of the questions including CIS teaching staff, staff from the Library, administrative staff and CIS student mentors.

This approach to orientation proved effective. Early data (to the census date of 31 March 2007) indicated a marked improvement in the retention of this student cohort from 84% in 2006 to 96% in 2007 (Duff et al. 2007). Although the high retention rate may alter, this outcome, combined with a 10% improvement in commencing undergraduate success rate in the Division from 2005 to 2007, is hopeful. The strongest testimonial of the success of Quest is...
the fact that 100% of the students who attended orientation participated in the blog activity. Not only did they blog, but their work was interactive, colourful, whimsical, academically deep (with some well considered accounts about ‘the future of the mobile phone’). Figure 1 depicts the winning blog entry.

Learning Connection @ Mawson Lakes Blog
The Learning Connection @ Mawson Lakes blog was launched in the first half of the 2007 academic year to raise the profile of Learning Connection, and encourage student engagement with available services and resources. This is achieved through:

• incorporating a strong student voice in the blog
• identifying student resources at strategic times in each study period and thereby encouraging timely access to resources (for example, exam resources).
• using an informal, conversational and socially-engaging voice.

This blog avoids ‘uni speak’ and overtly attempts to foster engagement at the local level.

The blog has a subscription facility (delivered by Feedburner) and students select whether they wish to subscribe to the blog. On subscription, the blog feeds the most up-to-date postings to the subscriber via email. The blog uses Google Blogger which has been customised for local needs. A logo has been added to assist with corporate branding so that it clearly belongs to Mawson Lakes students and their place of study (Figure 2).
Each week the Learning Connection team, led by Learning Advisers, hold brief planning meetings to identify topics and allocate responsibility for the week’s postings. Postings are brief, casual and functional sometimes promoting other resources such as Talking about exams. Sometimes postings are made by Learning Connection staff e.g. Learning Advisers. At other times invited stakeholders post messages e.g. Academic Librarians or Deans. Occasionally students give voice to their own experiences. The postings are moderated for grammatical correctness, but informality is encouraged. On average there are two postings a week in teaching weeks to strike a balance between regular updates and cluttering in-boxes.

The blog is promoted in various ways e.g. in staff email signatures, in emails promoting Learning Connection workshops, via the student portal and in workshops where students provide email addresses (both home and/or UniSA) which are manually entered later. As a timely transition or learning issue arises the blog link is also circulated to courses and programs to encourage subscriptions.

Writing in the Sciences blog
The Writing in the Sciences blog was launched in the first half of the academic year in 2007 to promote the idea that writing is essential to scientists. Initially it was a campus-based initiative but is now accessed by staff and students with aligned interests in the Division of Health Sciences. This blog has a strong learning and teaching orientation achieved through:

- incorporating the voice of published academics in the blog
- involving library staff in occasional postings
- its topics e.g. The fundamentals of report writing providing specific and timely hyperlinks to resources used in class as well as ‘just in time’ resources (for example, exam resources). Again the blog is linked to Feedburner in a similar way to the more generic blog. Occasional postings are invited from stakeholders e.g. librarians and lecturers with English as an additional language, to represent varied viewpoints.

Combined Blog impact factor
It is clear that the blogs are an effective form of outreach to local students and others, and much more effective than Learning Advisers achieve through occasional classroom contact and individual appointments. At September 2008 there were a total of 4320 student enrolments linked to Mawson Lakes campus (including internal, external, and transnational engineering students in Singapore). Between January 2008 and September 2008 the
Learning Advisers had 277 individual appointments with students—a ratio of 1 in 15 students on campus. At the time of writing, the blogs have a combined subscription of 795, almost 1 in 5 enrolled students. In August 2008 there were 10 postings across both blogs. This translates to a total of 7,950 student contacts compared to 38 learning adviser individual face-to-face student contacts.

*Feedburner* data demonstrates high levels of site access in both Adelaide and Singapore, the two main locations with a high concentration of UniSA students. Indications are that the blogs strengthen student links to campus, self-help resources and campus information.

**Talking about exams**

*Talking about exams* is an asynchronous university-wide discussion board or forum established in 2005 by Learning Advisers to provide a flexible service where students could post questions in the period leading up to and during examinations. It was prompted by the fact that many commencing students at Mawson Lakes are inexperienced in sitting exams or sitting their first exams in Australia. It is especially useful to students at this campus where exams are a strong feature of assessment.

*Talking about exams* ensures that students can access information on a ‘just in time’ basis. Each study period around exam time the link is widely promoted e.g. advertised in emails, workshops and the blogs. Different campuses take turns in answering the questions.

*Talking about exams* uses the locally developed *UniSAnet* online teaching and learning platform (where some universities would use *WebCT* or *Blackboard*). The strength of this discussion board is that students and staff can be notified when there is a post. Students can post questions which can be answered by Learning Advisers, referred to other staff, and addressed by peers.

The *Talking about exams* discussion board prompted many postings as well links to other resources. In the last exam cycle (From May 2008 to July 2008) there were 54 student postings on *Talking about exams*. This compares to 20 individual learning adviser contacts across the entire university for ‘exam strategies’ over the same period.

In addition, *Talking about exams* became a top referring domain for the *Learning Connection @ Mawson Lakes* blog. Between June 6 and June 12 (a seven day period) there were 39 links from the *Talking about exams* discussion to *Learning Connection @ Mawson Lakes* blog. During the same period, there were 9 outgoing links to *Talking about exams*. This highlights the importance of wide distribution and linking one resource to another. As with blogs these figures—while significant in themselves—do not reflect the actual viewing rate given the majority of visitors to any website are readers rather than contributors.

**Discussion**

The emphasis at UniSA on enhancing the student experience of university reflects the higher education sectors’ focus on increasing student retention and success by addressing student transition to the university context (Krause et al. 2005). The 2006 FYE project in ITEE found that commencing students at Mawson Lakes are not pro-active and even tend to ignore significant problems because they do not understand their environment, the roles of staff, or the expectation that they need to be self-sufficient in their learning. For example, in early 2006, it was found some students were not attending class due to family trauma but were unsupported because they did not tell staff about the issues affecting their progress (Smith
Thus despite vigorous efforts to ensure student access to information about making a good start at university, it was clear that new approaches were needed.

The Web 2.0 options seemed a timely option that might better fit student needs, not just because they are preferred, but because they are effective tools of outreach. Wider use of new modes of communication could help to neutralise the demographic drawbacks of the campus by fostering socialisation and promoting the human face of staff, partly through the use of the more casual register of Netspeak (Crystal 2006). This style of communication acknowledges students’ capacity for making meaning of their situations in many contexts. They are able to shift from formal to informal register depending on the need and chosen vehicle of their communication (Kalantzis, Cope & Fehring 2002). Yet developers were sensitive also to the fact that students do not want us to be using new technologies (such as blogs) just to show that we can (Cluett & Skene 2007). They need to be used for educationally sound reasons; reasons which link to engagement—institutionally, academically and socially.

Wilcox, Winn and Fyvie-Gauld (2005) link student withdrawal to their sense of incompatibility with their chosen course and limited opportunities for socialisation. The mentor-led campus CIS Quest provided a problem-based approach where students had to work collaboratively to construct an account of their Quest. The blogging exercise encouraged students to actively participate in their learning both inside and outside class and to incorporate their out-of-class experiences into the learning process. These activities ensured a high level of student participation in learning and helped them develop supportive peer groups extending beyond the boundaries of the classroom (Tinto & Goodsell-Love 1993). By acknowledging and promoting their interest in computer science and encouraging casual and purposeful student-staff and student-student interaction the CIS Quest met the elements essential to success (Kuh 2007). Most importantly, by offering social and academic engagement from their first day on campus, it promoted successful integration and reduced ‘the likelihood of withdrawal’ (Wilcox et al. 2005, p. 720).

The Learning Connection @ Mawson Lakes blog took students a step closer to social engagement because of its inclusivity. Students could ‘hear’ authentic student voices with newsy stories written by mature-aged and international students. Although few readers choose to add comments, this reticence to get involved is typical online behaviour. Through subscription and a strategic editorial plan, information can be streamed in a life-cycle approach. For example, at exam time the posting about what to expect in examinations if you are new to Australia was linked to various other resources. Anecdotal feedback indicates continuing student interest in the latest postings.

Talking about exams, while still interactive in its nature was far less colourful in its presentation. While the CIS Quest, Learning Connection @ Mawson Lakes and Writing in the Sciences used photographs, branding and other graphics, the Talking about exams discussion was far less attractive and (arguably) engaging of students. However, it was both social and academic, with students feeling ‘free’ to ask frank questions and express their disappointment at exam results. To an extent this discussion has achieved an actual student community, if virtual, better than the blogs, with students crossing discipline divides to answer each other’s questions, work together and support each other as students (Tinto & Goodsell-Love 1993). This may be due to its ‘purpose built’ nature (its sole purpose was for discussion) or because it used an interface familiar to students.

These examples present alternate ways of engaging first year students using new and familiar online approaches. Traditionally during the first year, Learning Advisers provide
ongoing support for students from orientation, through the early assignments to their first exams. This is done with workshops, online resources, and student consultations. The new opportunities for engagement discussed here, and represented in Figure 3 against a study period timeline, add an extra level of dynamism not provided in current corporate resources.

![Figure 3: UniSA: Mawson Lakes process of student engagement](image)

What is characteristic of Web 2.0 applications is the way in which communication becomes ubiquitous. *Learning Connection @ Mawson Lakes* and *Writing in the Sciences* employ an electronic subscription so that students can gain access to it in a multitude of ways. In turn, *Talking about exams* is also delivered in both flat and interactive way using feeds and emails. In other words, the old can adopt the principles of the new. This is an imperative when we consider, as Clewett and Skene (2007) suggest, that Net Generation students prefer this type of delivery.

A feature of the working environment at UniSA is the high level of collaboration between staff in Learning Connection and academic staff. In this work we are trying to use Web 2.0 approaches to extend our own boundaries, and explore the potential of social software to allow us add value to our teaching by making it more accessible and relevant to students (Oblinger & Oblinger 2005).

**Conclusion**

New software applications represent social practices that are now mainstream with our students. While our examples are arguably on the periphery of mainstream teaching and learning and not fully tested there is sufficient student engagement to encourage further work and a review of our approaches to meeting student learning needs. They serve the same altruistic purpose of providing support to students in strengthening their alignment with campus, their writing, academic integrity and overall success. The next step for Learning Advisers and Academic Developers here may be to explore further the social propensities of Web 2.0 software such as *MySpace*, *YouTube* or *Skype*—addressing further the rapidly changing and interconnecting communication tools of our students. If this work proves useful in enhancing communication with students we, as staff working on a day to day basis across schools and programs, divisions and administrative units, are ideally placed to play an integral role in shifting practice within the university. Our helicopter view of student needs
and our unique span between faculty and students mean that many Learning Advisers and Academic Developers can position themselves at the vanguard of technological change and educational innovation. As university staff we need to acknowledge change and diversity among our students in the context of the burgeoning social function of the Internet. We must cut the cloth appropriately or appear anachronistic.

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