Twitter: What is it good for?

Using social media to foster retention and learning for journalism students

Steve Harrison , Liverpool John Moores University

Abstract: The issue of student engagement is one of the most crucial in HE, as it is intimately linked to both retention and learning. Previous studies have underlined the value of community in fostering engagement. This project draws on the concept of "ambient awareness" (exemplified here by the Twitter service) to argue that such social networks engender "ambient communities" and hence can perform similar functions to a traditional community in relation to engagement. Finally a pilot study among second year journalism students uses Twitter to explore the practical implications of this approach.

Keywords: Social media, Twitter, journalism, engagement, retention community.

The haunt of PR-obsessed celebrities, home of aimless tittle-tattle and host to a daily barrage of groundless rumour – there's no escaping the social networking phenomenon of Twitter, nor its impact on news media. News organisations have taken to employing Twitter correspondents[1]; it is routinely scanned as a source of news; and media professionals value it as an instant networking tool.

So given its current ubiquity, can Twitter have a pedagogical value for journalism students and, if so, how can we measure it and ensure it is used most effectively? Should we consider it as a resource in journalism education, and what can it offer the curriculum? In short: ***what is Twitter good for?***

The aim of this paper is to survey the current ways in which Twitter is used for journalism education, and then offer a model of 'ambient community' which links social networking to journalism student engagement and retention. The model is tested in a small-scale study of second year journalism students, and it is concluded that such an approach can deliver measurable results when used in an aligned fashion.

The story so far:

For those who have been living under an analogue rock for most of this century, Twitter is a micro-blogging service which launched in 2006. Initially adopted extensively by media and educational professionals, it has recently grown in popularity with younger users and it is now believed around 65% of users are under

---

1 Sky News appointed Ruth Barnett as Twitter correspondent in March 2009, although her role was short-lived (http://www.guardian.co.uk/media/mediamonkeyblog/2010/jan/14/sky-news-reporter-off-tweets)

25 (Cheng and Evans, 2009).

Despite its relative newness, Twitter has already been adopted in various ways by Higher Education professionals. Grosseck and Holotescu (2008) list 15 educational uses of Twitter, ranging from a platform for metacognition to collaborative writing, and 20 ways in which it can have a positive impact on education.

In his blog article Twitter for Academia, Prof Dave Parry lists a further 13 uses, and sparked 16 pages of comment from users giving their own suggestions (Parry, 2008), while Prof Alan Lew details eight blogs which list further ways in which Twitter can be used in Higher Education (Lew, 2008).

Reporting on his experience of using mobile Web 2.0 including Twitter to enhance learner engagement, Thomas Cochrane of Unitec New Zealand found that "significant changes in pedagogical approach and levels of student engagement have been realised" (Cochrane, 2008: 10).

Arguing from a constructivist perspective which focuses on "students being involved in learning environments as an explorative and social process" (ibid. 1), Cochrane outlines a Communities of Practice (COP) model whereby students were provided with smartphones to mediate on and off campus learning.

By combining mobile-friendly Web 2.0 capabilities - including photoblogging, geo-tagging, video recording, voice recording, and text input – with campus-based projects, Cochrane concludes that "the student and lecturer experience within the programmes have been enhanced" (ibid. 10).

Of especial relevance to the current paper is Cochrane's observation that, "Many of the identified Learning scenarios were serendipitous rather than planned by the lecturers" (ibid. 5).

Finally, the JISC (Joint Information Systems Committee) report 'Higher Education in a Web 2.0 World' recognises seven drivers for a move to use of tools such as Twitter in the HE environment, among which are diversity in the learner population ("Web 2.0 offers the sense of being a contributing member of a learning community") and a richer educational experience ("such an approach helps students become self-directed and independent learners") (JISC, 2009).

The emergence of Twitter as a news source has led to fresh ways of consuming news. Alfred Hermida draws on Ian Hargreaves's concept of "ambient news" ("news [...] today surrounds us like the air we breathe. Much of it is literally ambient", Hargreaves, 2003: 2-3), to characterise Twitter as an "ambient awareness system" (Hermida, 2010a).

Hermida defines this as a computer-mediated, asynchronous, lightweight and always-on communication system: "a user receives information in the periphery of their awareness ... the system is always-on but also works on different levels of engagement" (ibid. 5).

Hence the user is immersed in a background sea of news, information and gossip, into which they will plunge to retrieve significant gobbets when these impinge upon their awareness. The user crystallises the normally fluid, amorphous sea of news around a meaningful issue, at which point awareness switches from the ambient to the engaged.

By analogy with "ambient awareness", this paper introduces the concept of an "ambient community" – a virtual network comprising a stream of micro-messages which, taken together, engender a peripheral notion of community. While rarely at the centre of the user's attention, at any time the user can dip into this stream to focus on or develop specific relationships or conversations (Lave and Wenger, 1991, use the phrase, although they do so in respect of real-world communities; and Dallas, 2004, defines the term as "community empowered through ambient intelligence", which is closer to the meaning intended here, albeit not in the context of journalism education).

Twitter users are aware of a constant stream of conversations, information, links and messages at the periphery of their awareness; they dip into this stream to retrieve or focus on details which interests them: "Twitter becomes part of an ambient media system where users receive a flow of information from both established media and each other" (Hermida, 2010b: 4).

Hence Twitter is communal; unlike email or instant messaging it is a public space where messages are shared. To send a Twitter message is to act as part of a community, albeit a loosely-structured and ambient one: "Twitter is largely public, creating a new body of content online that can be archived, searched and retrieved" (Hermida, 2010b: 4). This statement is true in principle, although in practice Twitter's usefulness as an archive is highly limited, since its current archival functionality is minimal (ReadWriteWeb, 2010).

Engagement, retention and learning for journalism students

It is widely accepted that the engagement of students is a necessary if not sufficient condition for them to become and remain effective learners: "The notion of engagement is key to both student autonomy and the wider goal of ISL [improving student learning] ... the evidence is convincing that fostering student engage-

ment does improve their learning" (Bryson and Hand, 2007: 349, 360).

Biggs and Tang assert that "with a history of successful engagement with content that is personally meaningful, the student ... develops the expectations that give confidence in future success" (ibid. 33).

The view is supported by empirical studies, including the annual American NSSE surveys (n.d.) and the study conducted by Ahlfeldt et al which found: "Students participate more in a classroom and also report better understanding of course concepts when steps are taken to actively engage them" (Ahlfeldt et al, 2005).

However, like the concept of "learning", "engagement" is a nebulous term which, as Bryson and Hand aver, "appears to have many meanings" (op cit: 352). These include the student being active in class; being an "active agent in society" (Mann, 2001); and being an autonomous leaner.

Similarly, when discussing retention, Yorke and Longden are doubtful that a single theory is capable of capturing in full the richness of the influences at play: "We remain unconvinced that a single theoretical formulation - a 'grand theory' - can be constructed to include all of the possible influences that bear .. on retention and success. Hence a comprehensive ... theory is probably beyond reach." (Yorke and Longden, 2004).

Bryson and Hand conclude there is a continuum ranging from engaged to alienated, and the same student may exhibit different degrees of engagement at the level of the task, the module, the programme of study, and within the institution. Nevertheless, they agree that "engagement is perceived to be a highly desirable goal with positive outcomes for all parties", where engagement is understood to be at the level of "the learning environment, broadly conceived" (op cit: 352-354).

Zepke and Leach have developed a four-fold taxonomy of engagement, comprising motivation and agency; transactional engagement; institutional support, and active citizenship (Zepke and Leach, 2010: 169). They add the cautionary note that "engagement is complex; it includes many factors that interact in multiple ways to enhance engagement or trigger disengagement" but concur that engagement is an indicator of student success (ibid. 175).

The link between retention, engagement and notions of community/belonging have been made by, among others, Kember et al (2001), Tinto (1993) and Perry (1999). Yorke and Longden emphasise this sense of engagement via belonging as a major factor in student retention: "An aspect of the social networks embedded in student sub-groups also fosters social integration: the greater the extent to which a student is named by other students as someone with whom they frequently talk, the greater the student's degree of social integration" (Yorke and Longden, 2004).

They cite Astin's characterisation of community as "a small subgroup of students espousing a common purpose through which group identity, a sense of cohesion and uniqueness, occurs. Communities emerge from residence halls, the classroom and student peer groups" (Astin, 1984, in Yorke and Longden, 2004). We argue that an ambient community shares the same characteristics and performs a similar function in terms of identity and cohesion.

The motivation for the present paper grew out of a Level 2 undergraduate module within the Journalism department at Liverpool John Moores entitled User Generated Editorial Content. This looked at how Web 2.0 technology enables the consumers of news to become part of the process of news production. Since Twitter is such a significant player in this area, it was decided that students would be asked to use Twitter throughout the module, both as a means of communication and part of their assessed portfolio. In addition, live Twitter messages from students were displayed in real time on a large screen during workshop sessions as a "back channel".

Hence the journalism students could experience at first hand how Twitter could function as a news medium, and a tool for reflecting on that function.

As the module progressed, it became evident that students were using Twitter in ways not originally envisioned by the tutor, reflecting the serendipitous usage noted earlier by Cochrane. In addition to specific tasks they were instructed to do (and a lot of general chit-chat!), students were using Twitter to talk among themselves about the module, topics relevant to the overall journalism programme, and journalism in general. Without prompting, they were researching, collating and sharing links and information which extended or supplemented the course material.

It became apparent that the observed behaviour of the students on Twitter was exactly that of deep learners – moreover, deep learners who were aware that they were part of a community and hence sought to share ideas with each other: "The deep approach arises from a felt need to engage the task appropriately and meaningfully" (Biggs and Tang, 2007: 24).

Articles

It seemed plausible that through the use of Twitter, the cohort was developing a sense of community qua fellow Twitter-users, and this was contributing to their engagement with the module.

In order to test this hypothesis, it was decided to embark on a small-scale research project guided by the question: Can the use of Twitter encourage student engagement among journalism students? Three subsidiary questions were also identified, namely:

1. How can Twitter best be used to encourage journalism student engagement?
2. How can we measure the effectiveness of Twitter in encouraging student engagement?
3. Can we generalise from the context of this module to other institutions/programmes, or to other disciplines outside journalism?

The research project and measurement

The project was carried out via a content analysis of students' Twitter messages. As described by Bryman (2008: 289), the advantages of content analysis are that it is unobtrusive, highly flexible and can allow information to be gathered about social groups which otherwise might be difficult to access.

In principle, qualitative data are also available in the form of the module evaluation forms which the students were asked to complete at the end of the module; however, there are insufficient data to draw any meaningful conclusions from this source and in consequence it will not be used.

The key step in developing a content analysis is defining the taxonomy to be used: "The conceptually most taxing aspect of any content analysis is to define the dimensions or characteristics which should be analysed" (Hansen *et al*, 1998: 106).

In this study, each message will be sorted according to the taxonomy detailed in Table 1:

Table 1: ID taxonomy

ID	Message type	Description	Example	Rationale
1	Social, untargeted	general message not addressed to anyone in particular	"Valencia's been exceptional tonight, although Rooney's movement has been world class. Albeit against maybe the worst Milan defence ever seen"	The content is not specific to the programme and has no audience in mind. The message does not make use of any Twitter features.
2	Social, targeted	general message addressed to another member(s) of the cohort	"@lssmj2004chrisb looking like a hung parliament, whatya reckon?"	Although the content is not specific to the programme, it does make use of the Twitter "@" reply feature and involves the cohort (or part of the cohort) in an asynchronous conversation.
3	Relevant to module (prompted)	message content contains specific information pertaining to the module, as directed by tutor	"Hermida-Twitter embraces newsrooms as a device to distribute breaking news concisely and quickly;it's an expression of ambient journalism"	The student is sending a message on a topic directed by the tutor, and so must work out how to get their point across in 140 characters. By definition, the content is specific to the module and therefore can be of use to other members of the cohort (eg, those who missed the session or didn't follow it completely).

4	Relevant to journalism programme	message content concerns journalism in general	"Roy Greenslade: BBC reporter on being 'a Jew and a journalist' http://viigo.im/3Q0s"	An unprompted message which relates to journalism in general; both a record of the student's reading, and an index of how valuable they feel the content is, since they have elected to share it.
5	Relevant to module (unprompted)	message content contains specific information pertaining to the module but not directed by tutor	"Making Twitter work for journalists http://bit.ly/aD-6Mwk"	An unprompted message which relates specifically to the issues explored in the module. Both a record of the student's reading, and an index of how valuable they feel the content is, since they have elected to share it. The message may supplement or extend material supplied by the tutor.
6	Relevant to other module(s)	message content contains specific information pertaining to another module(s)within the journalism programme	"Todays lecture on political parties was excellent... Really useful for our social change essay!!"	An unprompted message which relates specifically to the issues explored in another module. This demonstrates a sense of "ambient community" via the awareness of the needs of the rest of the cohort, since the student feels they could benefit from the information posted.

The taxonomy has been designed to reflect different levels of engagement with Twitter, from the phatic to the academic. In particular, unprompted messages which specifically relate to the journalism module (labelled **ID 5** in Table 1) are seen as particularly valuable by this study – they implicitly acknowledge the existence of an ambient community, since the messages are addressed to other students in the expectation they will derive direct benefit from them. It is also an index of the value the sender places on the content of the message, because they have judged it worthy of being circulated within the community.

For each student, their Twitter messages were analysed and sorted into one of the six categories listed in Table 1. Because primacy is given to unprompted messages relevant to the module (**ID5**), the number of messages in this category is correlated with the student's grade. This is not a theoretically rigorous approach, since the quality of tweets contributes to the grade and hence is not a truly independent variable; however, Twitter messages only contribute 10% towards the module grade. It is therefore possible that students are fully engaged (as measured by their Twitter messages) yet perform badly in assessment, which would undermine the research hypothesis – so to this extent, the hypothesis is falsifiable.
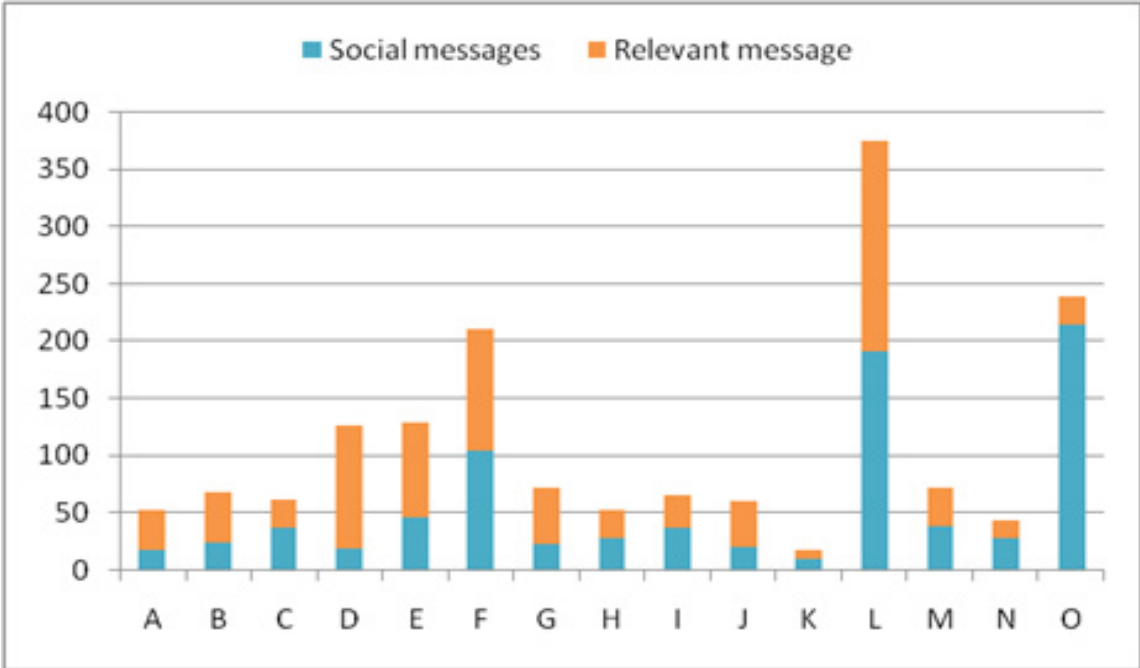
Sixteen students out of the 23 registered on the module agreed to participate in the research; however, one student withdrew from the degree programme at the end of semester 1, so only 15 sets of Twitter messages have been analysed, coded as students A-O.

In total, there were 1,652 messages. The mean number of messages per student was 110, and the range was from 18-375.

Of the 1,652 messages, 844 were classified as "social" (51%) and 808 as "relevant" (49%). "Social" messages are defined as those with **IDs 1** and **2** in Table 1, while "relevant" messages are defined as those with **IDs 3-6**. There were 73 re-tweets (4.4%) but almost all of these were generated by just three students, which undermines the value of this dimension for analysis, and hence it was disregarded for the purposes of this study.

Graph 1 shows each student's messages broken down into "social" or "relevant" categories:

This is a mixed picture and suggests students saw no great difference between social and relevant messages – they neither felt compelled to focus on module-specific messages nor did they use Twitter exclusively

Articles

for social purposes. Instead, there is a mixture of the two, which varies between students. This is largely
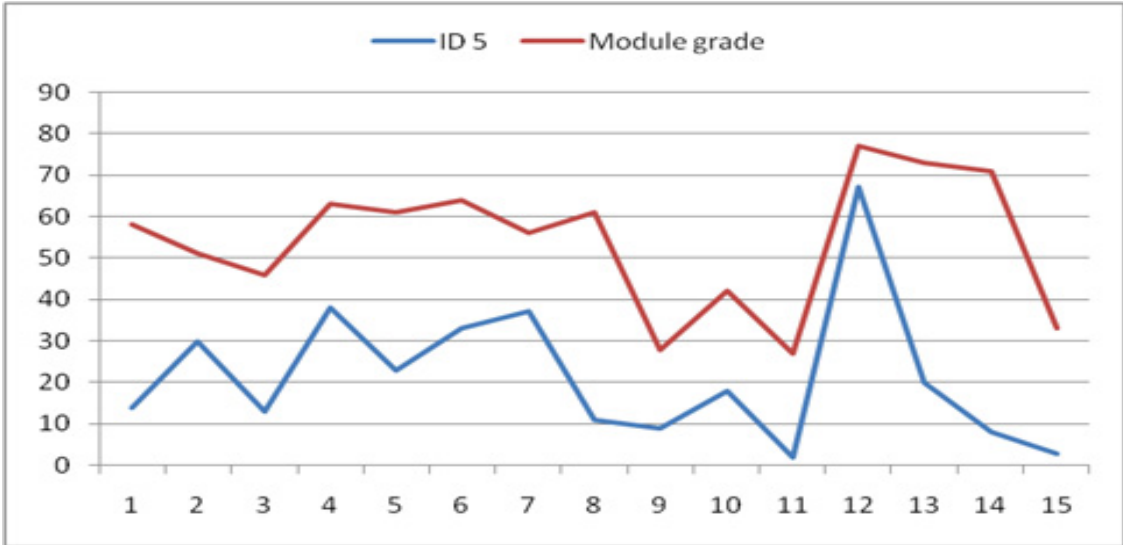

what one would expect if the journalism students have adopted Twitter as a communal space – while they do discuss the module and academic life, they are also engaged in chit-chat, gossip and social networking.
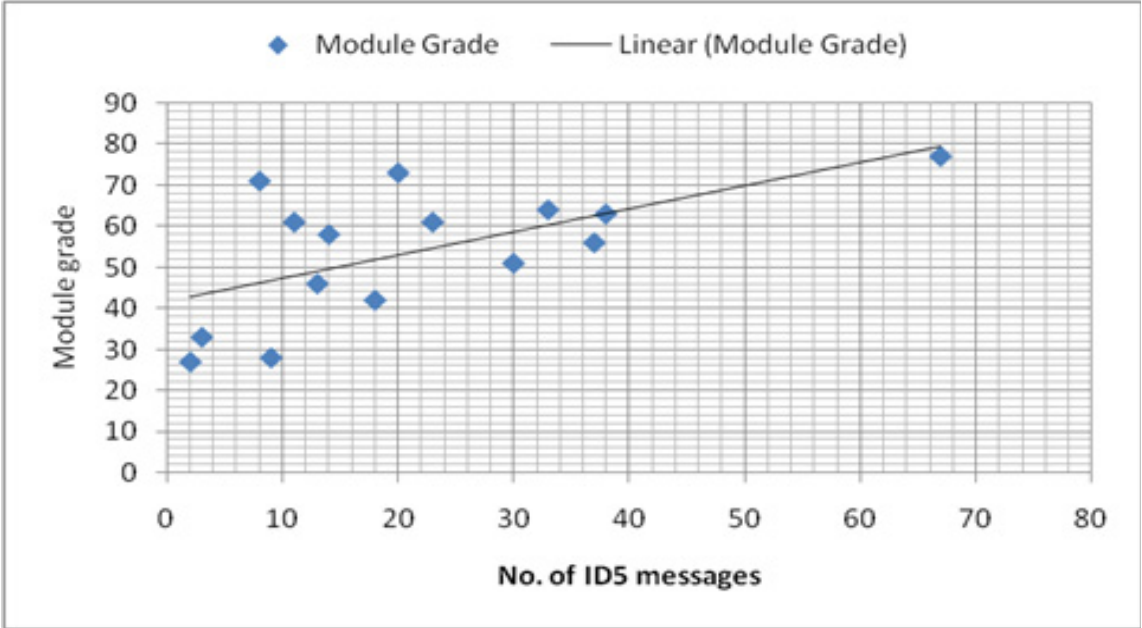
When we look at the number of unprompted relevant messages (**ID5** in Table 1) and graph them alongside the student grade, however, a clearer picture emerges. As mentioned above, these are the message types valued most highly in this study as they exhibit a high degree of involvement with both fellow students and with the module:

Graph 2: Student grade and ID5

The scattergram for the same data appears in Graph 3:

There appears to be a strong correlation between the number of such messages and the student grade. Indeed, this is the case. The scattergram is not curvilinear, and so we may use Pearson's correlation coefficient r. The Pearson r is 0.607, which is significant at $p<0.05$, which means there are fewer than five chances

in 100 of the result arising by chance (see Table 2). Bryson advises: "The convention among most social researchers is that the maximum level of statistical significance is p<0.05" (op cit: 334).

Table 2: SPSS output for the data in Graph 2

This study's interpretation of the result is that it strongly supports the research hypothesis. Journalism students who frequently made unprompted relevant tweets performed better; the claim this study makes is that this is at least partly because of their engagement with Twitter.

Hence the data displayed in Graph 2 strongly suggests that students who engaged with Twitter did fare better. Of course, this conclusion is open to dispute, since correlation is no proof of causality – it may simply be that those students who did well in assessment were those most likely to take to Twitter anyway.

What is beyond question, though, is that the cohort sent 808 journalistically relevant messages over the

Correlations

		No. of ID5 messages	Module grade
No. of ID5 messages	Pearson Correlation	1	.607[*]
	Sig. (2-tailed)		.016
	N	15	15
Module grade	Pearson Correlation	.607[*]	1
	Sig. (2-tailed)	.016	
	N	15	15

[*]. Correlation is significant at the 0.05 level (2-tailed).

course of the module, which in itself demonstrates a degree of engagement, albeit one which cannot readily be measured.

Hence with respect to the second subsidiary research question ("How can we measure the effectiveness of Twitter in encouraging journalism student engagement?"), this study has partially answered it by demonstrating a statistically significant correlation between a certain type of Twitter message and module grades; but also accepts that the effectiveness of engagement may be shown to exist while not always being measurable.

Articles

We turn now to the first and third subsidiary research questions: "How can Twitter best be used to encourage journalism student engagement" and "How can we generalise from the context of this module to other institutions/programmes, or to other disciplines outside journalism?"

The use of Twitter does foster a sense of an "ambient community" and in this respect contributes to student engagement on a broad level. However, the introduction of Twitter into the User Generated Content module arose out of considerations of constructive alignment (Biggs and Tang, 2007), because Twitter is part of the object of study, one of the tools used to complete assignments and part of the assessment process. This arises from the fact that Twitter has come to play a significant role within journalism practice.

It is less certain that Twitter would work so well in a module or programme which was unrelated to journalism, and was simply "bolted on" to an unrelated curriculum in an unaligned fashion. Hence instructors must judge the degree to which social media tools are or can be aligned to their module learning outcomes before employing Twitter-like services as some sort of panacea.

For the sake of completeness, it should be noted that of the 15 Level 2 students who took part in this study, all have progressed to Level 3. However, the numbers are so small that no significance can be attached to this in terms of retention.

Conclusion

During the course of this project, three inter-related principles have become evident which can guide attempts to use Twitter as a mechanism for engagement – namely: privacy, pressure and play. Privacy is crucial as students must be secure in the knowledge that their messages are not going to be shared with the wider world, but confined to the group. Then there must be some pressure on them to use Twitter on a regular basis, such as pressure from the tutor to send a tweet on a specified topic to deadline. Finally, students must be free to play around with Twitter and not feel inhibited in the messages they send, so over-direction by the tutor must be avoided.

The first and third of these can be achieved by ensuring that students create a fresh account specifically for their academic work (assuming they already have Twitter accounts; in the cohort under consideration, only three did) and that they set their privacy settings to "Protect My Tweets". This means that any Twitter messages will not appear on the public timeline, but can only be seen by people whom the students accept as followers (ie, the other students in the group). This overcomes an objection some students may have about being compelled to use the Twitter service – namely, that their privacy may be compromised. But in addition it means students feel less inhibited about their messages since (apart from the instructors) only fellow students will see what they write.

An element of compulsion is essential to achieving a critical mass of take-up. Left to themselves, journalism students may find the novelty of using Twitter wears off and – short of a compelling reason to use it – they get out of the habit of creating or checking for messages. Therefore the task of sending Twitter messages on a regular basis must become part of the module curriculum and, ideally, be assessed. For example, the instructor may ask students to précis a reading in the form of a tweet, write a news flash, or work together to cover a breaking news story. The instructor can intervene to deliver feedback using Twitter, or to set or clarify further assignments. In this way, students develop a routine of checking for and sending messages.

On the basis of this project, it is clear that once journalism students become used to regular exposure to Twitter, their usage grows organically and they begin to use the service for fun, to organise their social lives and engage in chatter. It is this free adoption of Twitter that leads, or can lead, to the deep engagement with learning that motivated this study – the sharing of resources, the sifting of recommendations and the widening of research.

The researcher and educationalist Mantz Yorke remarked: "We need to focus on teaching as an essential element of engagement" (Yorke, 2009), and in her paper on learner engagement and alienation, Sarah Mann adds that: "We need to be alert to our own positional power ... and to become aware of the conditions in which we work and the responses we make to them" (Mann, 2001: 17).

Often in discussions of student engagement (and, by extension, retention), the emphasis is on the student as agent, such as Tinto (1993). While individual agency is important, the social nexus within which students and instructors are embedded is an equally powerful constituent of engagement. By encouraging students to become part of an ambient community, we use our positional power to supplement the possible conditions open to them. This maximises the opportunities for the student to participate in deep learning.

Naturally, the value of this approach will depend largely on how closely social media can be aligned with the course learning objectives. However, most journalism modules ought to fit this category, so it seems

reasonable to conclude that in the context of journalism education, Twitter and similar services can indeed act to encourage student engagement.

Bibliography

Ahlfeldt, S. Mehta, S. and Sellnow, T. (2005) Measurement and analysis of student engagement in university classes where varying levels of PBL methods of instruction are in use. Higher Education Research and Development, 24:1, pp5-20. Routledge.

Astin, A. W. (1984) Four Critical Years: Effects of College on Beliefs, Attitudes and Knowledge. Jossey Bass. Quoted in Yorke and Longden (2004)

Biggs, J. and Tang, C. (2007) Teaching for Quality Learning at University. 3rd ed. OUP

Bryman, A. (2008) Social Research Methods. 3rd ed. OUP

Bryson, C. and Hand, L. (2007) The role of engagement in inspiring teaching and learning. Innovations in Education and Teaching International 44:4. Routledge.

Cochrane, T. (2008)Using Mobile Web 2.0 to Transform Pedagogy and Engage Learners. http://akoaotearoa. ac.nz/download/ng/file/group-3300/n3447-using-mobile-web-20-to-transform-pedagogy-and-engage-learners.pdf (accessed 2/7/2010)

Grosseck, G. and Holotescu, C. (2008) Can we use Twitter for educational activities? Paper presented at 4th International Scientific Conference, Bucharest April 17-18 2008. http://adl.unap.ro/else (accessed 23/6/2010)

Cheng, A. and Evans, M. (2009) Inside Twitter - www.sysomos.com/insidetwitter (accessed 23/6/2010)

Dallas, C. (2004) The ambient community 2010. www.docstoc.com/docs/5393755/The-ambient-community-2010 (accessed 2/7/2010)

Hansen, A. Cottle, S. Negrine, R. And Newbold, C (1998) Mass Communication Research Methods. Macmillan.

Hargreaves, I. (2003) Journalism: Truth or Dare? OUP

Hermida, A. (2010a) Twittering the news: the emergence of ambient journalism. Journalism Practice, 4:3. Routledge.

Herminda, A. (2010b) Ambient news, ambient journalism. Unpublished paper, provided to author via email.

JISC (2009) Higher education in a Web 2.0 word www.jisc.ac.uk/publications/generalpublications/2009/heweb2.aspx (accessed 2/7/2010)

Kember, D. Wong, A. and Leund, D. (1999) Cultivating a sense of belonging in part-time students. International Journal of Lifelong Education, 20:4. Quoted in Bryson and Hand (2007).

Lave, J. & Wenger, E. (1991) Situated Learning: Legitimate Peripheral Participation. Cambridge University Press.

Lew, A. (2008) Twitter tweets for Higher Education. http://web20teach.blogspot.com/2007/08/twitter-tweets-for-higher-education.html (accessed 23/6/2010)

Mann, S. (2001) Alternative perspectives on the student experience: alienation and engagement. Studies in Higher Education, 26:1.Carfax Publishing.

NSSE (n.d.) National Survey of Student Engagement - http://nsse.iub.edu/index.cfm (accessed 23/6/2010)

Parry, D (2008) Twitter for Academia. http://academhack.outsidethetext.com/home/2008/twitter-for-academia/ (accessed 23/6/2010)

Perry, W. (1999) Forms of Intellectual and Ethical Development in the College Years. Harcourt Brace.

ReadWriteWeb (2010) Twitter's Entire Archive Headed to the Library of Congress. http://www.readwriteweb.com/archives/twitters_entire_archive_headed_to_the_library_of_c.php (accessed 13/2/2011)

Tinto, V. (1993) Leaving College: Rethinking the Causes and Cures of Student Attrition. University of Chicago Press.

Yorke, M. and Longden, B. (2004) Retention and Student Success in Higher Education. OUP.

Yorke, M (2009). Lecture delivered to PG Cert students at Liverpool John Moores University

Zepke, M. and Leach, L. (2010) Improving student engagement: Ten proposals for action. Active Learning in Higher Education, 11. Sage.

Contact Steve Harrison on s.harrison1@ljmu.ac.uk

Articles