

City Research Online

City, University of London Institutional Repository

Citation: Hewett, J. (2013). Using Twitter to integrate practice and learning in journalism education: Could social media help to meet the twin challenge of both dimensions?. Journal of Applied Journalism & Media Studies, 2(2), pp. 333-346. doi: 10.1386/ajms.2.2.333_1

This is the draft version of the paper.

This version of the publication may differ from the final published version.

Permanent repository link: https://openaccess.city.ac.uk/id/eprint/13921/

Link to published version: https://doi.org/10.1386/ajms.2.2.333_1

Copyright: City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

Reuse: Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

 City Research Online:
 http://openaccess.city.ac.uk/
 publications@city.ac.uk

Using Twitter to integrate practice and learning in journalism education: could social media help to meet the twin challenge of both dimensions?

Jonathan Hewett City University London

Keywords: journalism, journalism education, social media, Twitter, social constructivism, social learning.

Abstract

Developments in journalism and in education pose multiple challenges for journalism educators at a time of great change in both sectors. They face changing demands and expectations from a range of stakeholders, including students, practitioners and employers.

The challenges result partly from new forms of journalism practice – such as the use of social media – and partly from changes in education, such as a recognition of the value of social constructivist approaches, including peer and informal learning.

This article suggests that one way forward is to take advantage of the dual dimension of social media – as both a vocationally important part of the curriculum and as a medium with recognised educational potential. Drawing on a study of the use of one key social media platform (Twitter) by postgraduate journalism students, it highlights the scope for such an approach.

Introduction

It would be hard – if not impossible – to find anyone involved journalism who would plausibly deny that it continues to undergo huge changes. These range from its structures, finances and outputs to its processes, technologies and employment. At the risk of deploying a word that is probably overused to describe the situation, 'we are in the middle of a sustained crisis for journalism' (Beckett 2010: 1).

The higher education (HE) sector, too, has been undergoing enormous change in recent decades. For HE in the United Kingdom, this has involved cuts in government funding and increased intervention during the early 1980s and a shift towards values and practices then more familiar in the private sector. Changes continued through a phases of expansion with the post-1992 universities and a period of massification. The changes between 1979 and 2010 have been characterized as three periods: retrenchment and the management of change; new faces and emphases; and gloss and spin (Gewirtz and Cribb 2013).

Operating at the intersection of both fields, journalism education has therefore been subject to substantial upheavals and uncertainties (Drok 2012). Examining these in detail falls beyond the scope of this article, but even if one gives only brief consideration to some of the immediate stakeholders in journalism education – students and their parents, teaching and research staff, and journalists and employers, for example – and their situation, the extent of the changes is striking. If one includes debates about the role of journalism education, its paradigms, critical scholarship, and its relationship with the industry, such as those raised by Adam (2009), Hirst (2010) and Bromley (2013), it is clear that changes abound.

One key question for any course that involves 'doing journalism' is how best to address the changing practices of journalists. Responding to the move to online publication, journalism programmes in the UK were adapting by the late 1990s but apparently not making wider changes. One study at the time noted the existence of courses in web journalism, 'but on the periphery and chiefly with new media practices grafted on to established forms' (Bromley and Purdey 1998: 77).

Six years later, little seemed to have changed, according to a study of the position in Belgium, Germany and the Netherlands (Deuze et al. 2004). The authors highlighted 'a fundamental problem for journalism education: is it to be a follower, or an innovator or journalistic practices?' They concluded that 'most if not all programs and schools seem to be embracing the "follower" model of education' (27).

Within this field of journalism practice, the greatest challenge for journalism education has arguably been posed by the swift growth of social media and the impact of online networks. Not only do they represent a new set of tools with which to undertake acts of journalism, they are also changing the profession itself (Gulyas 2013). 'Students now need to develop a different set of skills to deal with information abundance, network distribution, intense competition and a communication process that is interactive, asynchronous and nearly free' (Mensing 2010: 515).

It is not only in journalism that such developments have been having a profound effect, of course. In education, too, the impact of social media and other web 2.0 technologies have been increasingly in prominence. This results partly from the affordances for teaching and learning that they can offer, which became an important theme HE as social media became more widespread – for policymakers (Melville 2009), academic practitioners (TLRP 2008) and educational researchers (Rollett et al. 2007) alike.

Great claims have been made for the educational possibilities of online activity. The web has been said to offer educators 'a chance to construct a medium that enables all young people to become engaged in their ideal way of learning', for example (Brown 2000). Web 2.0 has 'the capacity to radically change the educational system" and "provides opportunities to better motivate students as engaged learners rather than learners who are primarily passive observers of the educational process' (Ziegler 2007).

At the more critical end of spectrum, social networking has been blamed for helping to create a 'Google generation' of learners who struggle to think independently and critically (Brabazon 2007). Those with a naïve belief in the utopian potential of online environments have been dubbed 'cyberoptimists' (Gur-Ze'ev 2000). Little wonder that some researchers have warned against the tendency towards 'doomster' and 'booster' discourse on the subject (Selwyn and Grant 2009). Within UK higher education, a major review was commissioned explicitly 'to investigate the substance behind the hyperbole surrounding "Web 2.0" and to report on the implications this may have for the UK Higher and Further Education sector' (Anderson 2007: 4). One indication of how recent is the enormous growth in social networking is that this report classified social networking as one of the 'newer Web 2.0 services' (13).

Seeking to address concerns about the reliability of the limited pedagogic research available on the subject, the UK Economic and Social Research Council established a strand in its Teaching and Learning Research Programme (TLRP) to concentrate on technology: its £12m Technology Enhanced Learning (TEL) research programme (TLRP 2008: 2). While noting grounds for caution, it broadly endorsed the use of web 2.0 tools in HE – while highlighting journalism as one field particularly affected:

Web 2.0 tools appear to strengthen fundamental aspects of learning that may be difficult to stimulate in learners. There are problems with web 2.0 learning in practice, but these tools do seem to mark a step change in the ways in which learners can interact with and on the web. Alongside business, journalism and medicine, it is therefore perhaps not too fanciful to talk of "education 2.0" (9).

One of the tensions noted in the use of social media in education concerns the dissonance between its informal use on the one hand, and the more formal approaches of institutionalised teaching on the other. Because of the educational potential of web 2.0, educators must try to 'lessen the gap between informal practices and formal procedures (TLRP 2008: 24). Related to this, informal learning was identified as the 'primary educational significance of social networking' (TLRP 2008: 21) but also as lacking support and integration into institutional systems (De Jong et al. 2008).

Rather than ignoring or avoiding some of the more diverse uses that students make of technology, educational systems and institutions would do better to encourage the type of networking and creativity that students already display outside of formal educational settings, argued Attwell (2007).

The TLRP review concluded that: 'Any educational practice that concerns the playful, expressive, reflective or exploratory aspects of knowledge building is likely to find web 2.0 tools and services a powerful resource. Moreover, educators can safely assume that most learners know about them' (9).

In terms of learning theory, social constructivism has become a key approach to social media in education, because of the central place it gives to the communication between individuals. While the work of both Piaget and Vygotsky underpinned the development of constructivism, the former emphasised the individual, cognitive processes of learning (Fosnot and Perry 2005), while the latter focused attention to the importance of social interactions. These drive the development of knowledge, which develops internally, Vygotsky believed. Thus he focused not only on individuals' internal processes but on "the role of the adult and the learners' peers as they conversed, questioned, explained, and negotiated meaning" (Fosnot 1996).

Drawing on Vygotsky's research, Lave and Wenger placed the social dimension at the heart of their analysis of learning. Revitalising an older model of apprenticeship, they theorised learning as an authentic, socially situated activity involving legitimate peripheral participation in a community of practice. This highlighted how "learners inevitably participate in communities of practitioners, and that the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (Lave and Wenger 1991).

Essentially then, the characteristics of web 2.0 and social media – their discursive, collaborative and communal functions – seem well-suited to social constructivist approaches to teaching and learning (Ferdig 2007; Hemmi et al. 2009). Such technologies "mirror much of what we know to be good models of learning, in that they are collaborative and encourage active participation by the user" (Maloney 2007: 26).

Applying such considerations to the convergence of both disciplines in journalism education indicates the scope for social media to harness both dimensions – educational as well as professionally relevant in journalism – and to combine the benefits of the two areas in one process and/or activity.

This thinking informed the development of a blogging project on the MA journalism course run by the author. Students learned about blogging and its professional relevance and uses in journalism – and were expected to run their own blogs. They were required also to contribute to a private group blog to articulate, reflect, share and comment on their learning and practice as journalists and on current issues in journalism. This proved a valuable medium and process for learning, making use of some of the features of web 2.0 relevant to both journalism and education (Hewett 2007).

At that time, Twitter (having been launched in 2006) and other forms of social networking appeared not to be widely used among journalists, at least not for work purposes. However, Twitter in particular gained increasing attention, partly as a result of its use as a valuable source for reporting high-profile stories such as the crash of an airliner on the Hudson River in New York in January 2009 and the G20 protests in London in April 2009 (Day 2009).

The use of Twitter in education, meanwhile, was starting to emerge as a strand of research, often through the publication of case studies on blogs and/or in conference papers (McNeill 2009). Most of these describe and/or review how educators used Twitter in classroom or other settings of formal education: for example, as part of writing assignments, as a channel for feedback and discussion, or announcements about practical arrangements for courses (Lew 2007; Young 2008). Based on the literature and own their experience with a similar tool, Grosseck and Holotescu listed 15 educational uses of Twitter (2008).

One basic risk in exploring the use of technology in teaching and learning, particularly for a newer technology, is highlighted by Laurillard (2008). She notes the fundamental trap of starting with the technology rather than the learning:

the solutions technology brings, in their most immediate form, are solutions to problems education does not have. The current vogue for podcasting is a good example [...]. It is an excellent solution to the problem of providing personalised mobile auditory wallpaper. However, no one ever suggested that the reason why education is failing is that learners do not have enough access to people talking to them. (139)

In some disciplines such as journalism, however, an additional factor may be relevant: the vocational relevance of particular technologies. Not all such hardware or software offers accessible potential for the education dimension, of course: some journalism students learn how to use layout software (often Adobe InDesign or QuarkXPress), for example, but it is not apparent how that could enhance the process of their learning. With social media, however, not only is the vocational imperative for inclusion in the curriculum probably stronger (layout software being relevant only for students studying print journalism) – but the potential for pedagogical benefit is clearer, too.

One other factor particularly pertinent in the case of social media is the element of socialisation into journalism, which tends to play a central role in journalism programmes in HE (Mensing 2010; Hirst 2010). Typically this has been facilitated through work placements in the industry, teaching by past and/or current practitioners, journalists as visiting speakers, and so on. The active presence of many journalists on Twitter and other networks indicates another channel through which this might take place.

The value of online networking to enable students to connect with practising professionals or other relevant experts in their field has been noted by some researchers. 'They can now more easily learn from and with industry, business, professional organisations, communities, and within an ever-expanding diversity of social, cultural, political networks', suggested Eijkman (2008: 93). Focusing not on journalism but another area of professional education in HE (nursing), Skiba urged educators 'to socialize students into this world [...] to introduce them to the world of professional networking' (Skiba 2008: 370).

Turning to journalism students, my own experience was that an increasing number of those that I taught were beginning to use Twitter extensively, although induction surveys showed they had been much more familiar with Facebook and blogging. It became clear that they were using it for purposes other than immediate journalistic research (such as finding sources for news articles). Informal discussion with some students, along with some of their public tweets, confirmed that they were using it not only to discuss their coursework and journalism with one other, but also engaging in dialogue with practising journalists.

The discussion of journalism, flagging-up of useful resources, sharing of relevant links appeared to share some characteristics of the blogging project. This in itself gave reason to think that students could combine use of another valuable and journalistically relevant technology with learning about journalism. Some students were using Twitter as the medium for this – but unlike the private course blog, their tweets were entering a wider, more public arena (except for the very few using private accounts). This provided the potential for them to make connections on Twitter with experienced, practising journalists, as well as other people.

For a programme geared primarily to preparing students for their first job in journalism, this connection with professional practitioners appeared to offer an additional dimension to the potential for learning. Combined with continuing interest in Twitter in the fields of both education and journalism, and a lack of published research on the topic, as noted by Ahmad (2010), this prompted me to study this cohort's use of Twitter.

Studying students' use of Twitter

The study had two primary aims: to gauge the extent of students' use of Twitter; and to explore how they had used it and their perceptions of its value.

Data was collected in three ways. First, the number of other users followed and following, plus the number of tweets sent (as displayed on students' Twitter profile pages), was recorded. Second, public tweets sent by students were collected (via a browser, saved as an HTML page, then reformatted and imported into a spreadsheet). Although the second element focused on tweets that were public, the students were asked to provide their informed consent to having their tweets accessed and collected. This reflected the retrospective nature of the data-collection and the importance of respecting students' own online activity (which, in this case, was not formally required as coursework or assessed). Third, students were surveyed using an online questionnaire.

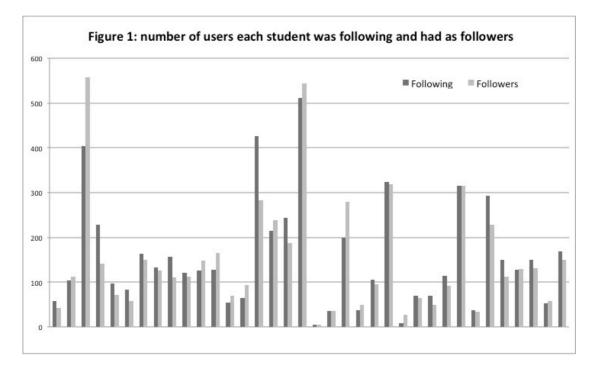
The selected date range ran from the first day of the programme until three weeks after the end of the final term. This was chosen to provide the potential for tweets that encompassed term-time, vacation periods and journalistic work placements. Follower and 'following' numbers were recorded at the end date.

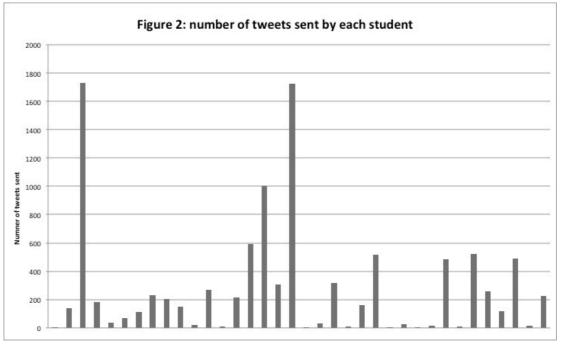
As a small-scale, exploratory study, it focused only on the 39 postgraduate students (one year's cohort of the MA/Diploma Newspaper Journalism programme at City University London). Three did not run a Twitter account. Of the remaining 36, 18 (50%) agreed to have their tweets collected, and 25 (69%) responded to the survey.

Levels of activity on Twitter

The number of users followed by students, and of those following them – providing an indication of the size of the community of others users with whom they were likely to interact – varied greatly, from single figures to more than 500 (see Figure 1). More typical was between 100 and 200: 14 out of 36 students had follower and/or following counts within this range. The median figures were 113 for the number of followers, and 127 for the number of user each was following. A simple indicator of activity, the number of tweets sent also varied enormously, ranging from one to 1,730 (see Figure 2). The median figure was 155 tweets. In total, those 36 individuals sent 10,215 tweets.

The sub-sample of 18 students who consented to have their tweets collected had a more active profile, with median figures of 128 followers; following 142 other users; and 215 tweets sent. In total, those 18 individuals sent 6,754 tweets.





More advanced use

Those tweets were analysed for the occurrence of @ (referencing other users) and # (hashtag) characters and URL references, to help gauge levels of intensity and sophistication of use. The level of use of @ was chosen as an indicator of conversation and more interactive content, as suggested by a number of studies (Mischaud 2007; Honeycutt & Herring 2009; Java, A. et al., 2007). Similarly, the presence of a URL indicates the sharing of content beyond that contained within a tweet itself, and hashtags are used predominantly for discussion and/or comment from or on a particular topic or event, with the implied intention of being seen by and/or contributing to a wider community of users.

The incidence of @, # and URLs was widely varied. A total of 5,725 occurrences of the @ character were found, ranging from 0 or 1 for three users to more than 1,000 for two others, including a maximum of more than 2,200s. Perhaps unsurprisingly, this reflected to some extent the level of use of Twitter. Excluding the five users who had sent fewer than 20 tweets, the occurrence of @ use as a percentage of total tweets was never lower than 37%. With the exception of one of the other 13 users, this was more than 50%. At its highest level of use, the number of @ occurrences reached 133% for one user, indicating that on average that this user's tweets contained at least one @, and a number included multiple users, the average (mean) figure was 54%.

Hashtags were much less frequently used, occurring a total of 464 times. Their use was also much less widespread: only four people had used them more than 40 times, and 12 less than 10 times. Two users accounted for more than 300 of the # total, and they were the two users with the largest number of tweets.

URLs were included 1,982 times in the tweet sample. As with hashtags, their use was less widespread than @. More than 1,400 URLs were accounted for by the four users who sent the highest number of tweets.

Survey results

The questionnaire produced results from 25 individuals, out of the 36 in the research sample potentially available.

Professional journalists formed the category of users that most students said they found useful or interesting to follow (92% rated them fairly or very useful/interesting to follow), followed by colleagues on the course (80%), and social media experts (76%). Friends from before the course and journalism students outside the university were rated the least relevant in this regard. See Table 1.

	Not at all	A little	Fairly	Very	n/a
Friends from before course	28%	32%	12%	8%	20%
Newspaper course colleagues	0%	20%	20%	60%	0%
Other journalism students at City	8%	16%	56%	12%	8%
Journalism students elsewhere	8%	32%	32%	8%	20%
Professional journalists	0%	4%	16%	76%	4%
Social media experts	4%	12%	36%	40 %	8%
Journalism tutors/academics	12%	20%	52%	12%	4%
News organisations [as opposed to	0%	32%	44%	24%	0%
individual journalists]					
City University journalism alumni	12%	24%	32%	16%	16%

Users found Twitter useful for helping them to learn about most aspects of journalism that were surveyed; top came interesting articles; discussion of published articles, blogs etc; and current issues in journalism (see Table 2).

Table 2: How useful did you find Twitter for helping you to learn about:							
	Not useful	A little	Fairly useful	Very useful			
How journalists work	4%	48%	40%	8%			
Online journalism	4%	24%	28%	44%			
Interesting articles	4%	4%	28%	64%			
Tips/advice	16%	16%	48%	20%			
Current issues in journalism	0%	12%	40%	48%			
Discussion of published articles,	4%	12%	16%	68%			
blogs etc							

Nearly three-quarters of respondents (72%) agreed or strongly agreed that Twitter helped them to extend their contacts in journalism (with journalists, editors etc); a larger number (76%) agreed they could have used it more in this regard (see Table 3). A total of 88% agreed they had learned useful things from the journalists in their Twitter network – and that journalism students should learn Twitter.

Table 3: Please indicate how far you agree/disagree with the following statements:							
	Strongly disagree	Disagree	Neutral	Agree	Strongly agree		
Twitter helped me to extend my contacts in journalism (with journalists, editors etc)	4%	4%	20%	48%	24%		
I could have used Twitter more to extend my contacts in journalism (with journalists, editors etc)	0%	8%	16%	64%	12%		
I learned useful things from journalists in my Twitter network	0%	8%	4%	52%	36%		
Journalism students should learn to use Twitter	0%	0%	12%	56%	32%		
Using Twitter effectively takes up too much time	4%	36%	36%	20%	4%		

In terms of students' use of Twitter for journalistic purposes, keeping up to date with news was the most widely reported (by all but 4%), followed by reading discussion of an issue or event, and finding/contacting people. Most respondents said they had used Twitter to ask for help, advice or suggestions (72%), and to respond to others' requests for this (80%), as well as to promote their own published articles, blogs etc (80%). Most students mentioned Twitter on their blogs (80%) but only around half in their CVs, a job application or job interviews. A clear minority (24%) agreed that using Twitter effectively took up too much time.

Discussion

Although the study of students' Twitter use involved only a small sample and did involve detailed analysis of the content of tweets, some findings suggest that some individuals were using it in a relatively advanced manner and finding it of value for learning about journalism and for making relevant contacts in the industry. It should also be noted that the journalistic use of Twitter (and probably students' familiarity with it) have developed further since this study was undertaken in 2010 (Artwick 2013). The range of use of Twitter found here indicates that journalism educators should not assume students have an account, know how to use it effectively, or will use it unprompted. There may be a case for checking that students are using it beyond the most basic level and – given concerns about the time involved – can do so efficiently. Incorporating it into assessment would be one approach.

It is striking that a high proportion of students surveyed placed a high value on following journalists on Twitter. Not only did 92% report them to be fairly or very useful/interesting to follow, but 88% agreed or strongly agreed that they learned valuable things from journalists in their Twitter network. Many also said it helped them to extend their contacts in journalism – but with a higher proportion saying they could have used it more for this purpose. Perhaps then it is unsurprising that a similar percentage agreed that journalism students should learn to use Twitter. If following and learning from journalists is indeed a valuable dimension for journalism students, in addition to the more obvious journalistic uses of using Twitter to find breaking news and sources, for example, it could be useful to include this in teaching and perhaps to provide examples and tips on how to locate relevant journalists to follow.

Most students did not rate journalism tutors/academics highly as useful or interesting people to follow (32% "not at all" or "a little"). While this may reflect a wide range of levels of public online activity on their part, from absent to very active, it also signals scope to develop further their use of Twitter.

Much more highly rated (second only to journalists) were their fellow students on the same journalism programme. This could reflect their use of social media to engage with others from their face-to-face activities as colleagues – but it also suggests that peer learning may be taking place or that their interactions on Twitter provide a promising foundation for this.

Overall, this article raises the dual dimension of social media as both professionally relevant for journalism students to learn to use, and as an educationally valuable tool or medium for them and those who teach them. In programmes in which curricula risks becoming overloaded (as the scope of journalistic activity itself widens) along with the time of students and teaching staff alike, the scope to combine both the focus and the means of learning is attractive.

The more public, less boundaried nature of Twitter – compared to many social networks, and even more so if compared to the closed online learning environments provided by universities – as well as its use by many journalists, mean it has particular resonance in journalism education. Students can learn from and engage with practitioners, beyond the formal curriculum and its constraints, while developing a valuable network of contacts and improving their use of a journalistically important medium. Combining both dimensions effectively – integrating journalism practice and student learning more closely in such ways – seems to merit greater attention in journalism education.

Adam, G.S. (2009). 'Jim Carey and the Problem of Journalism Education'. *Cultural Studies*, 23: 2, pp. 157-166.

Anderson, P. (2007). 'What is Web 2.0? Ideas, technologies and implications for education.' *JISC Technology and Standards Watch*, February 2007.

Artwick, C.G. (2013) 'Reporters on Twitter'. Digital Journalism, 1:2, pp. 212-228.

Attwell, G. (2007). 'Web 2.0 and the changing ways we are using computers for learning: what are the implications for pedagogy and curriculum?' http://www.elearningeuropa.info/files/media/media13018.pdf Accessed 20 May 2013

Beckett, C. (2010). The value of networked journalism. London: Polis/LSE.

Brabazon, T. (2007). *The University of Google: Education in the (post) information age*, Ashgate Publishing.

Bromley, M. (2013). 'Field maturation in journalism: The role of hackademics as a "motley crew". *International Journal of Cultural Studies* DOI 10.1177/1367877913483423.

Bromley, M. and Purdey, H. (1998). 'Journo-Morphosis: Today's New Media and the Education and Training of Tomorrow's "Cool" Journalists'. *Convergence: The International Journal of Research into New Media Technologies*, 4:4, pp. 77-93.

Brown, J.S., 2000. 'Growing up Digital: How the Web Changes Work, Education, and the Ways People Learn'. *Change*, 32(2), pp. 10-20.

Day, K., 2009. 'Is the G20 summit a turning point for Twitter?' http://blogs.telegraph.co.uk/culture/kateday/9354707/Is_the_G20_summit_a_t urning_point_for_Twitter/ Accessed 20 May 2013.

De Jong, T., Specht, M. and Koper, R. (2008). 'Contextualised Media for Learning'. *Educational Technology & Society*, 11(2), pp. 41-53.

Deuze, M., Neuberger, C. and Paulussen, S. (2004). 'Journalism education and online journalists in Belgium, Germany, and The Netherlands'. *Journalism Studies*, 5:1, pp. 19-29.

Drok, N. (2012). 'Towards New Goals in European Journalism Education'. *Journal of Applied Journalism & Media Studies*, 1:1, pp. 55-68.

Eijkman, H., 2008. 'Web 2.0 as a Non-Foundational Network-Centric Learning Space'. *Campus- Wide Information Systems*, 25:2, pp. 93-104.

Ferdig, R.E., 2007. 'Examining social software in teacher education'. *Journal of Technology and Teacher Education*, 15:1, p. 5.

Fosnot, C.T., 1996. *Constructivism : theory, perspectives, and practice*, New York: Teachers College Press.

Fosnot, C.T. & Perry, R., 2005. Constructivism: A psychological theory of learning. In C. T. Fosnot, ed. *Constructivism: Theory, perspectives and practice*. New York: Teachers College Press, pp. 8-38.

Gewirtz, S. and Cribb, A. (2013). 'Representing 30 years of higher education change: UK universities and the Times Higher'. *Journal of Educational Administration and History*, 45:1, pp. 58-83.

Grosseck, G. and Holotescu, C. (2008). 'Can we use Twitter for educational activities?' In *The 4th International Scientific Conference eLSE eLearning and Software for Education, Bucharest.*

Gulyas, A., 2013. 'The Influence Of Professional Variables On Journalists' Uses And Views Of Social Media'. *Digital Journalism*, 1:2, pp. 270-285.

Gur-Ze'ev, I. (2000). 'Critical Education in Cyberspace?' *Educational Philosophy and Theory*, 32:2, pp. 209-232.

Hemmi, A., Bayne, S. and Land, R. (2009). 'The appropriation and repurposing of social technologies in higher education'. *Journal of Computer Assisted Learning*, 25:1, pp. 19-30.

Hewett, J. (2007). 'Using a course blog to encourage critical reflection by students.' Higher Education Academy Annual Conference, 3–5 July, Harrogate.

Hirst, M. (2010). 'Journalism Education "Down Under". *Journalism Studies*, 11:1, pp. 83-98.

Laurillard, D. (2008). 'The teacher as action researcher: using technology to capture pedagogic form. *Studies in Higher Education*, 33:2, pp. 139-154.

Lave, J. and Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*, Cambridge University Press.

Lew, A. A., 2007. 'Web 2.0 Teaching Tools'. http://web20teach.blogspot.com/2007/08/twitter-tweets-for-highereducation.html Accessed 20 May 2013.

Maloney, E.J. (2007). 'What Web 2.0 Can Teach Us about Learning'. *Chronicle of Higher Education*, 53:18.

McNeill, T. (2009). 'More than just passing notes in class? The Twitter-enabled backchannel'. http://www.scribd.com/doc/16287533/More-than-just-passing-notes-in-class-The- Twitterenabled-backchannel Accessed 20 May 2013.

Melville, D. (2009). *Higher education in a Web 2.0 world: report of an independent Committee of Inquiry into the impact on higher education of students' widespread use of Web 2.0 technologies.*

Mensing, D. (2010). Rethinking [Again] The Future Of Journalism Education. *Journalism Studies*, 11:4, pp. 511-523.

Rollett, H. et al. (2007). 'The Web 2.0 way of learning with technologies'. *International Journal of Learning Technology*, 3(1), pp. 87-107.

Selwyn, N. and Grant, L. (2009). 'Researching the realities of social software use - an introduction'. *Learning, Media and Technology*, 34(2), pp. 79-86.

Skiba, D. (2008). 'Nursing Education 2.0: Social Networking for Professionals'. *Nursing Education Perspectives*, pp. 370-371.

TLRP (Teaching and Learning Research Programme), (2008). *Education 2.0? Designing the web for teaching and learning.* Economic and Social Research Council.

Young, J.R. (2008). 'Forget E-Mail: New Messaging Service Has Students and Professors Atwitter – Technology'. *Chronicle of Higher Education*, 54:35, p. 15.

Ziegler, S. (2007). 'The (mis)education of Generation M'. *Learning, Media and Technology*, 32:1, pp. 69-81.