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Tweeting to reflect on teaching practicum experiences

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Abstract

Microblogging as a form of expression has gained momentum, particularly in the past two years. A widely used version is Twitter, which began by asking 'What are you doing?' but changed that to 'What's happening?' in November 2009. While posts responding to this initial question were often inane and superficial, microblogging began to be harnessed for research and learning purposes. Changing the microblogging question can be profound. This paper reports on a case study with eight participants during a teaching practicum in 2009. These participants posted messages to Twitter from their phones or computers, as a way of examining the question "Does microblogging help teacher education students develop self-reflective practices?" A subsequent participant focus group interview discussed (digitally recorded) their Twitter/phone experiences. Methodologically, the thematic content analysis process extracted themes from the tweets, examining them in relation to both the research question and the subsequent focus group feedback. Tweet categories included pedagogy, complexity, emotions, curriculum/planning, and relationships. In terms of findings, a sense of community was an unexpected bonus, and while 140 characters was initially difficult and limiting for explaining ideas, it honed participants' reflective thinking. Participants generally decided that this project using Twitter was of great value in the very individual and often isolating experience of teaching practicum.

Keywords

Microblogging, Twitter, teacher reflection, teaching practicum, mobiles

Introduction

This paper outlines something of the brief history of microblogging, its use in some educational contexts, and introduces some understandings about reflection in education. It then explains the context of a small study and its findings.



Microblogging is a relatively recent extension of blogging (which is defined broadly as a frequent and chronological online publication of personal thoughts in a prose style), working in similar ways to texting (SMS) because of the limited number of characters (140) permitted per message. As a form of expression, microblogging, particularly using Twitter, has gained momentum over the past few years. In Twitter, a “tweet” (i.e., a microblog) was initially posted in answer to the question “What are you doing?” From November 2009, this was replaced by “What’s happening?”

In its infancy, a common criticism of this microblogging service was that postings were vacuous, inane and superficial. McFedries (2007), for example, early on considered that “most people just don’t see the point, and others dismiss it as a massive time-suck ... [because] of the unrelenting triviality of most people’s updates”, while Lyons (2009) slammed it as “a playground for imbeciles, skeezy marketers, D-list celebrity half-wits, and pathetic attention seekers”. A recent article (Cochrane, 2010) outlined, for example, how quickly Twitter can become a wide network for individuals, even when promoted by others as a stunt, and even when its original use is educational.

However, some microbloggers use it quite strategically, garnering large numbers of followers and proliferating links and ideas on a wide range of topics including politics, the arts, technology and humour. Lake (2009) and others (such as Jansen, Zhang, Sobel, & Chowdury, 2009) argue that microblogging is a useful advertising medium, maintaining business presence with customers, while librarians see it helping them interact with readers (Kroski, 2008). Jungherr (2008) suggests Twitter has value in promoting a social activism and democratic agenda.

In a promotional sense, a wide range of educational researchers/bloggers use Twitter to promote and share both their own work, and retweet others’ views/resources, using Twitter as a personal learning network (PLN) (for example, see olafelch, 2010). These networks link international educational researchers/bloggers such as timbuckteeth (Steve Wheeler), courosa (Alec Couros), c41pt (Jane Hart) and gsiemens (George Siemens) to other people’s networks, creating an intricate and vast web of professional acquaintances.

An extension of microblogging is the idea of backchannels at conferences to comment on and share experiences and presentations across a wide range of conference settings (McNeill, 2009; Reinhardt, Ebner, Beham, & Costa, 2009). It proliferated, for example, at the Digital Diversity Conference in Melbourne (Australian Computers in Education, 2010) as a way for participants to comment on the presentations and follow threads of ideas.

Microblogging in educational contexts has been growing. Holotescu and Grosseck (2009a), for example, used a Romanian microblogging service in a tertiary course, examining how participants wrote public messages, followed and contributed to discussions, monitored feeds and, when the course had ended, continued to collaborate and converse with each other thus extending their learning and social connections. These authors considered this latter collaborative and communication outcome was a “very important advantage”, as was the “ambient awareness” of communicating in short posts. Holotescu and Grosseck (2009b) also examined using microblogging for collaborative learning, as did Honeycutt and Herring (2009), who concentrated on the potential of such affordances to promote deliberate conversational interaction. Other researchers considered different aspects of Twitter’s potential, such as its topographical

and geographical properties (Java, Song, Finin, & Tseng, 2007) or what “community” might mean within its sphere of influence (Java, Song, Finin, & Tseng, 2009).

In terms of other educational research, Aspden and Thorpe (2009) used Twitter to understand where students learned. They used their mobiles to tweet about “Where do you learn?” Aspden and Thorpe (2009) argued that Twitter gave participants “the ability ... to update anytime, almost anywhere, and through a variety of devices ... integral to their lives” (para. 12). The limited scope of 140 characters in posts means that messages must be concise and focused. Such portability, or learning on the move, can also be called “time-shifted learning” (Chan & Lee, 2005, cited in Dale & Pymm, 2009, p. 86) because the boundaries of time no longer apply; learners who use tools like iPods and mobile phones choose the where and when of their learning “on the go” (p. 86). Microblogging coupled with mobile phones enhances this “on the go” affordance. However, such uses are still at relatively early stages in many educational contexts (Wheeler, 2009).

In one recent example, Wishart (2009) used personal digital assistants (PDAs) with initial teacher education students. Teacher education is the sort of programme where students, Wishart believes, “are expected to acquire, decipher, and understand a wealth of information, both pedagogical and practical” (2009, p. 266) as they navigate both university courses and practicum (school placement) experiences. His participants used PDAs to make notes during lessons or observations, create calendar entries, take photographs or videos, search the Internet, and source programme content. While issues arose relating to some students’ use of the tools, few used the PDAs for a key intended focus—that is, to share both their experiences and reflections via a blog with their tutors. Wishart noted the effects of the “overwhelming nature of the social and cultural context in which new technologies are trialled” (p. 274), but was also positive about what the experiment achieved, given the constraints. In this, he referred to the overload participants experienced while on practicum, both professionally and culturally, because they were in relatively unfamiliar territory. So why is reflection desirable in teacher education?

Reflection in education

Bengtsson (1995) suggests there are four areas of interest in reflection for educative purposes in teacher education: reflection as self-reflection, reflection as thinking, reflection as self-understanding and the distancing function of self-reflection. Boody (2008) describes teacher reflection as (a) retrospection, (b) problem solving, (c) critical reflection, or (d) reflection-in-action. Each of these can map onto the four categories Bengtsson (1995) identifies. For example, “retrospection” appears to link closely to self-reflection—the “bending [of] thought backwards to reconsider prior experiences” (Boody, 2008, p. 498) in order to better understand it and learn from it. In a sense, this also links to Bengtsson’s idea of the “distancing function of self-reflection”.

The problem-solving function of reflection has its origins in Dewey’s (1933) exploration of reflective thinking in relation to educational processes. It suggests that reflection is a process that helps resolve problems of practice. In this sense it links to reflection as thinking, as does critical reflection (Van Manen, 1977, 1995). The latter also links to reflection as leading to understanding, and thus the potential distancing function of reflection. Reflection-in-action both as a concept and practice, derives directly from Schon’s (1987) work in which he sought to describe how examining

practices leads to understanding both the relevant principles of practice, and how to strive for continual improvement in professional contexts. Reflection-in-action can be seen as a description of both distance from, and closeness to, an action, allowing the actor/practitioner to see it anew.

In real terms, developing reflection as a feature of teachers' professional practice is important for a number of reasons. Firstly, it is important because it is a means by which teachers can continue to review and adjust their pedagogical practices for their learners, so their learners have positive learning outcomes. Secondly, it is important for teachers so they can critically examine ideas and practices in a wider educational sense to judge their value. As Lewis observed,

in a profession as challenging as teaching, honest self-reflection is key. That means that we must regularly examine what has worked and what hasn't in the classroom, despite how painful it can sometimes be to look in the mirror. (Lewis, n.d. para. 1)

Thirdly, these reflective practices and processes are evaluative in a positive way. They suggest openness and a focus on the professional role rather than the personal self particularly when, as teachers, it can be difficult to separate the two. Finally, reflection is important because "teachers must be able to construct pedagogical practices that have relevance and meaning to students' social and cultural realities" (Howard, 2003, p. 195). Constantly reviewing how learning opportunities work for students is important. This reflection can also occur when seeking the views of students about learning (Demetriou & Wilson, 2010; Hopkins, 2010) because they can positively help shape a teacher's pedagogical practices.

Thus, Wishart's (2009) intended focus on reflection through PDAs, Holotescu and Grosseck's (2009a, 2009b) microblogging research plus Aspden and Thorpe's (2009) study using Twitter and mobile phones inspired my Twitter project, which is outlined next.

Study design

This paper reports on an intimate case study. The focus centred on examining the value of using Twitter to initiate and develop self-reflection during a teaching practicum where teacher education students were posted to a wide range of secondary schools across New Zealand. The overarching research question was "Does microblogging help teacher education students develop self-reflective practices?" The participants, a group of eight volunteer graduates (approx 9% of the cohort; 4 women and 4 men) in a one-year graduate secondary teacher education diploma course, represented diverse subject areas, including physical education, music, accounting, and technology subjects (hard materials and food). None of the participants had used Twitter before. A closed Twitter group was established with the technical help of the university's e-learning centre (WCEL) staff, so participants could follow each other and tweet to the nominated hashtag (for example, #uow). A hashtag is a collection shorthand, making it easy to collect and follow all tweets using that specific tag. Since this study's Twitter group was to meet the required ethical requirements about privacy and confidentiality, the Twitter hashtag is no longer used and the specific account has closed.

During participants' second, 7-week practicum, they were expected to make three daily tweets to the hashtag in response to their experiences and any of the following question choices:

- What am I learning now?
- What do my students say about their learning right now?
- What do I need to overcome or solve?
- Where am I learning right now?
- What am I going to do next?
- What is getting in the way right now? and
- What am I thinking about right now?

Participants thus developed an individual and collective chronology of reflections and observations spanning the practicum (see below). As the researcher, I monitored the tweets and intermittently responded as the practicum progressed, posting 35 of the 529 tweets. Most of my tweets occurred in the first two weeks, reassuring participants as they got used to the process. Later, some of my tweets were questions to promote critical thinking about their own tweets.

Since Twitter is accessible via mobile phones, this use was encouraged because tweets could be sent as thoughts occurred, thus making it a nimble just-in-time tool. It meant that walking in corridors between classes, at lunch, after school, or on the way home, sharing car journeys at the end of the teaching day and debriefing, could be sites of reflection, able to be captured immediately. Computer-sent tweets, usually posted some time after the fact, were an alternative to this “on the go” option.

The tweets are listed in chronological order, from the oldest at the bottom to the most recent at the top. In essence, this is a reverse chronology. This list could be examined in at least two ways: individuals' lists, or by chronology in context. The analysis of the tweets considered participants' understandings of the practicum experience, and their deliberate self-reflections, which are an attribute critical to effective teaching and learning (Beauchamp & Thomas, 2009; Cahill & Adams, 2008; Pollard, 2005; Rich & Hannafin, 2009; Roberts, 2009; Santoro, 2009).

After the practicum, participants met as a focus group on campus to discuss their Twitter experiences. This discussion was digitally recorded as a supplementary data source of themes in relation to both the research question and the tweets. Thematic analysis was the principle method used to examine the data, which led to examining the recurrence of content, leading to categorising specific tweets under the headings of *pedagogy*, *emotions*, *relationships*, *complexity/curriculum/planning*, *reflections* and *other*. Content for this purpose was understood as both topic and context. Tweets selected for inclusion in this paper were chosen to represent key ideas. This paper is thus a partial examination of the data.

Findings and discussion

In total, participants tweeted 494 times over the 7-week practicum period. While one person tweeted 94 times, the average was about 60 tweets per person. Initially, most tweets peppered the range of categories outlined earlier. However, by about week 3 of the practicum, they concentrated on complexity, curriculum and planning (49 tweets), pedagogy (123 tweets) and reflections (175 tweets).

For example, one participant's tweets noted that, "one student has poor literacy, doesn't want to work and disrupts anyone he can. Teaching includes coming up with a strategy for him ..." and later, "a teacher can not control a student's behaviour, but a teacher can manage a student's behaviour". (All quotes are verbatim.) These suggest that the participant was able to (a) identify a problem (literacy), (b) identify a consequence of the problem (the behaviour), and (c) realise what a teacher's responsibility is (a strategy to support the student's learning). The post about classroom management also identifies a way to conceptualise it.

Another participant observed that she "realised that some kids sit back and pretend they no nothing, but when you give them a task that can be done solo, they strutt it". Varying learning activities for students over time from group to pair to individual, can be important to student engagement, and this participant's growing understanding of such pedagogical variation is apparent here. And when situations became difficult, participants were buoyed by the rapid replies from their peers. For example, one participant was faced with "Heart broken after school by Y12 boy with big personal probs, he was so upset & crying, made me cry! Needs lotsa love & nurturing". This elicited almost immediate tweets in support, reflecting the developing sense of community these participants experienced. Such responses reflect Zagami's (2010) trial of using mobile technologies to support students' social network practices in teacher education practicum experiences in Australia.

The focus group discussion, held on campus post practicum, revealed that supportive tweets were highly valued, reducing participants' feelings of isolation and emotional overload. They also admitted that they found reassurance in each other's highs and lows. Brevity also made reading tweets a fast task, and whether the emotion expressed was grief or joy, the mood could easily be conveyed. For example, one participant tweeted early in his practicum, "So if 1thing from pract! surely this is to confirm to ourselves that tchng is wat we want 2do! i am convinced it is having a ball!!!!!!!!!!!" and, "So who comes home exhausted but buzzing at the same time?" The overuse of exclamation marks reinforced an emotional response in a readily recognisable way. Another simply said, "... had an ICT lesson well planned that went to custard 2day". Thus the ability to use colloquial and text message conventions meant that tweets reflected not only ideas, but also mood. At the same time, tweets exhibited turn-taking cues, and punctuation reflected and acknowledged both emotions and social interaction (Borau, Ullrich, Feng, & Shen, 2009). Holotescu and Grosseck's (2008, 2009) focus on the social dynamics of microblogging appears to be also reflected in these tweets.

Participants' relationships with students elicited many highs. One participant said "Y9 [approximately 13 years old] Māori have amazing knowledge retention & are enjoying sharing with the kids who have missed class. Pretty cool ...!" Another noted, "hav no cntrol over baggage stds [students] bring 2 class but can redirect or use negativity to good by relationship building. Takes time but happening". Another observed that "when the lesson reflects your personality, students listen. Students listen to people, not lesson plans or books", noting that "students love boundaries. They know where they stand and what they can do in your class. You just have to set the boundaries". These tweets directly link to participants' pedagogical experiences in negotiating learning with teenagers, understanding themselves as teachers, and examining something of the complex nature of teaching. When one participant noted

that “students just wanted to do practical, no theory ... [and that she needed to] find how to use the practical work to introduce theory concepts”, she revealed pedagogically reflective thinking (Boody, 2008) about the need for maintaining balance between academic learning needs and immediate interests. It was also about understanding pedagogical imperatives, and demonstrated reflection-in-action.

Other participants observed their associate teachers’ interactions with students. One physical education tweet said: “cringing inwardly as teacher allows students 2 pick teams 1 by 1 until a couple are left feeling rejectd and left out”. Later, she considered the gender dynamics involved, wondering, “R girls 2 intimidated by boys performance? Mayb something 2 b said 4 seperatd PE classes”. Without Twitter recording the revelations, such observational and wondering moments could have been lost.

As the practicum drew to a close, tweets concentrated on issues of pedagogy, changing from a content focus to a learner focus.

In the subsequent focus group discussion, participants were asked the extent to which this project helped precipitate deliberate reflection. They asserted that tweeting three times a day forced them to consider not just *what* they did, but *why* and *how*. And while it was initially difficult to essentialise thoughts into a tweet, participants agreed that they had to think very deeply about what to convey in their 140 characters. In other words, tweeting helped them *know*. Perhaps this knowing is a case of retrospection as Boody (2008) outlined. This process of synthesising ideas into 140 characters eventually meant thinking beyond a lesson’s content to its effects. This led to participants thinking about what they could legitimately alter to improve learning conditions for students. Perhaps this project’s focus helped them shift their thinking to concentrate more on the learning experiences of their students.

At least two participants mainly used their mobile phone to tweet throughout their practicum because they enjoyed its portability in capturing thinking. About half used both their phones and their computers. The rest reverted solely to their computers, finding a full keyboard easier to use than their phones’ keypads.

All of the participants mentioned feeling constrained by their schools’ policy of banning cellphone use. They did not want to be seen using their mobiles in classes when they were banned for students. To mitigate this, those who used their phones to make tweets often waited until break times or after the school day ended. Thus, the intended immediacy of mobiles phones for tweeting was often stymied by constraints beyond participants’ control. On the other hand, this delay often suited participants. This greater distance from the event gave them room to rethink before tweeting. So while this meant losing immediacy, these later tweets were often deeply reflective and concise, intensifying retrospection (Boody, 2008).

In later informal conversations with participants, some expressed excitement in the potential of using microblogging with students. For example, one technology teacher thought it could help students record their thinking while developing hard materials projects. He felt this would connect to practices students engaged in anyway (texting) and would be a quick way to record ideas and it would be cheap: in the New Zealand context, mobile messages via SMS are free. Another participant began to wonder if microblogging could help students engage in both enterprise learning and in social science subjects, particularly business studies/accounting/economics classes. Others expressed a desire to use it in their first two years of teaching, both as a means of heightening their pedagogical awareness and as a support mechanism. It would

therefore seem that Twitter has indeed a place in educational contexts and can also support deep pedagogical thinking, social cohesion and connection.

Conclusion

This small case study examined the question “Does microblogging help teacher education students develop self-reflective practices?” Twitter chronologically logged participants’ reflective thinking during a school practicum, reduced isolation and supported a sense of community. Even though participants were expected to use their mobile phones to transmit their tweets immediately, this was not always possible; half of them used their computers regularly instead, logging thoughts about relationships, pedagogy, planning, curriculum and complexity, emotions and reflections. An “other” category recorded aspects of daily life and social interaction, which mirrors how people connect with each other on a regular basis in informal settings. All participants valued the regular contact within this community because it mitigated their feelings of isolation while they were individually flooded with a wide range of practicum experiences. Sharing these experiences was highly valued. And while they found the 140-characters limit initially restricted their ability to explain ideas and experiences, the character limit focused participants’ thinking to purposefully reflect on, and actively understand, what was happening around them. Their experiences mirrored those described by Zagami’s (2010) primary practicum students, suggesting that Twitter has value in supporting a collaborative social network where shared understandings can be aired and developed. The Twitter project provided a focus for participants in that it helped them actively examine what was happening around them, and synthesise the ideas into a brief post that was then available to read in relation to others’ posts. This shared experience, coupled with the synthesis of thinking, was highly valued.

Schools’ protocols for using mobiles constrained participants’ use of their mobile phones to tweet, as did the fiddliness of their phones’ keypads. Some participants therefore preferred using computer keyboards instead. The small size of the case study is an added limitation, but as a pilot study, it is a useful basis for future projects to build on. Some opportunities for development can include replicating this study with a much larger group; using Twitter with other groups which require practicum/internship experiences; using Twitter with new teachers when they take on full-time teaching jobs to examine and support their first two years’ teaching apprenticeship; examining the use of backchannels in classes and lectures to support collaborative knowledge-building; or inviting teachers to use Twitter with classes, such as in hard materials technology classrooms, so students can record their design project thinking.

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