Tales of Teachers Changing Practice

By Dr Rosemary Abbott

In March of this year, I was delighted to present at the SLAV conference, *Students at the Centre of Learning*. It provided me with an opportunity to reframe the story of my research on teacher practice within a context for those who work in school libraries and who play a vital role in student learning.

As a profession, we are well aware of the value of our work in terms of student learning outcomes. The literature is evidence of the importance of reading, the impact of teacher-librarians and a well-resourced library. Teacher-librarians have been at the forefront of using digital technologies for several decades (Elliott, 2005). We have been early adopters through the use of library management systems, CD-Rom technology, Web 2.0 tools and, more recently, social media. We also have the privilege of seeing both elements of the Balcony/Dance floor – a metaphor that effectively describes both viewing the big picture of what happens in a school, combined with drilling down to what is happening in individual classrooms and for individual teachers.

"Learning is about enhancing our capacity for a complex and changing future" (Stoll, Fink & Earl, 2003, p. 189). With a desire to examine student learning as my particular motivation, I decided to undertake research into the use of digital technologies in the classrooms of my own school. My initial focus was on students' experiences and the part played by the teacher in shaping the nature of these experiences. As is often the way, the course of my research changed over time and the focus shifted incrementally from students to teacher. This paper deals with research into the ways of looking at teacher learning and the importance of the teacher self when classroom practitioners are required to change. It draws upon my conference paper and explicates the reasons for undertaking the research, the narrative methodology used and the major findings that emerged. In sharing the story of this research with you, it is my hope to provide some insights into different ways of looking at teacher behaviour, which may be of assistance in your collaborative work with teachers.

Beginning the tale

My research focus took me beyond the walls of the library. Of course the work done by those of us in school libraries frequently does move beyond that physical space in many ways, including into the virtual world. From my own gazing across the school landscape emerged my initial interest and this was particularly triggered by my observations of students and their teachers when integrating digital technologies into classroom practice. My place in this landscape was something I needed to explicitly acknowledge. I was not an outsider coming in to the school and conducting research at arm's length with little knowledge of the teachers involved (Anderson, Herr, & Nihle, 1994; Sikes & Potts, 2008). I was an insider with multiple roles: Head of Library, and member of ICT and Heads of Faculty committees. Use of the concept of 'Multiple I's' (Connelly & Clandinin, 1999) facilitated consideration of my place within the research. By acknowledging the multiple roles I held within the school, I hoped to avoid unproductive collisions of these various selves that might impact upon the research.

Setting the scene

The role of teacher has become increasingly complex (Groundwater-Smith, Ewing, & Le Cornue, 2001) with demands of curriculum, pastoral programs and social education. More is expected of teachers "but without additional time" (Finger, Russell, Jamieson-Proctor, & Russell, 2007, p. 47) being allocated to them. Local and national educational authorities require that schools and teachers meet their requirements, including participation in student achievement testing and related data provision. In an ever complicated world (Perkins, 1992), there is "constant and significant change" (Hough, 2008, p. 15). Indeed, "schooling must deal with the future, for schools are, or should be, preparing young people for what lies ahead" (Macdonald & Hursh, 2006,

p. 129). Digital technologies are clearly part of that future and are an intrinsic part of 21st century schooling (Moyle, 2010).

Consideration of the pressures on teachers, particularly when they are required to make extensive use of digital technologies in teaching practice, became the focus of my research. The study sought to investigate what school leaders could consider when requiring such changes in practice.

The specific focus of the research was the practice of a group of teachers in one post-primary school where the majority of curriculum documentation was online and digital technologies were used extensively. The desire to place teachers at the heart of the research arose from two sources. The first was my own preexisting relationships with the teachers, a factor that also located me at the heart of the research. The second source was the literature confirming the role of the individual teachers in both student achievement (Hattie, 2003) and in shaping the responses to change within a school (Ertmer, 2005; Hargreaves, 2005; Zembylas, 2003). It appeared that for some teachers, using technology in the classroom required a considerable shift in their practice and placed considerable pressure on them. It therefore seemed potentially useful to focus upon the teachers as individual human beings with particular experiences, beliefs and reactions as, according to Palmer (2007), it is necessary to look at the "teacher's inner life" (p. 3) or "selfhood" (p. 3) when contemplating making changes in schools

Research approach

I took the decision to use narrative methodologies in the study. I wished to bring to life the stories of a group of teachers, and found the following quote useful in distilling my reasons for doing this:

How to encompass in our minds the complexity of some lived moments in life? You don't do that with theories, You don't do that with a system of ideas, you do it with a story (Cole, 1989, cited in Bochner & Ellis, 2002, p. 264).

Further, a narrative approach provided me with the best opportunities to tell the teachers' tales with all their accompanying complexities and inconsistencies.

Using Autoethnography

I wanted to position myself within the research in an open and ethical way. I wished to find a way to interweave my own story with the events of the research and the experiences of the teachers. For this reason, I chose to use the narrative methodology of autoethnography. In brief, autoethnography can be described as "one person's view of reality constructed around and through other people's" (Dyson, 2009, p. 25). It "let's you use yourself to get to the culture" (Pelias, 2003, cited in Wall, 2006, p. 2). Early in the piece, it became clear that the study centred upon the lives and experiences of the teachers. Before the data gathering commenced, I was already being drawn into the story. Reading key authors (Bochner & Ellis, 2002; Chang, 2008; Ellis & Bochner, 2000; Reed-Danahay, 1997) confirmed that it was important to acknowledge this and weave it into the story.

Activity Theory

Activity Theory (Engestrom, 2008; Kaptelinin & Nardi, 2006; Nardi, 1996) was used as both the theoretical framework and a tool for data analysis in the research. My intention in doing this was to gain insight into the teachers' actions and reflections. The use of Activity Theory placed the teacher at the heart of the investigation, through its recognition that you are what you do. It revealed the important role of teachers' belief systems and the role of experience in the building of such beliefs. Activity Theory "has been relied on to study contexts of implementation of innovation in education, such as when new technology is introduced and conflicts occur between teachers' beliefs and their actual practice" (Murphy & Rodriguez-Manzanares, 2008, p. 3).

A number of studies have examined the use of digital technologies in education and provide evidence of the productive use of Activity Theory (Arievitch, 2007; Feldman & Weiss, 2010; Sannino & Nocon, 2008). It seemed

Research Design

The research consisted of two phases and was conducted over a period of 18 months. Phase 1 was intended to provide a snapshot of the realities of practice for the teachers, what they did each and every day, and what issues arose. This phase was also intended to guide the structure of the second phase, to see what mattered to the teachers and what issues emerged for the school. The questionnaires related to the online curriculum they were using and their views of change and the digital world. Eighteen teachers participated, with considerable teaching experience, but from a broad range of curriculum areas. Some were enthusiastic users of learning technologies while others were reluctant and sometimes fearful.

The first phase commenced after teachers were invited to participate by responding to a series of email questions, sent over a 10-week period:

- Series 1 and 2 related to experiences with the School's online curriculum at the time
- Series 3 sought responses to the online world
- Series 4 asked about views of change and innovation
- Series 5 related to professional learning

The emergent themes from the data of Phase 1 were used as a framework for the design of Phase 2. The advantages of online learning were acknowledged but issues of student distraction and technology reliability were seen as negatives. Online learning was seen as potentially more time consuming by some teachers. Teachers perceived that their own interactions with the online world were limited in comparison to their students. Whilst all acknowledged the need to integrate digital technologies into practice, they found some difficulty when this was mandated. The teachers perceived that it was necessary to move to a focus on student-centred learning, but that a greater commitment of time for planning and use of digital technology was required. A need for time dedicated to appropriate professional learning was identified but the timing was critical to uptake – not at the end of the day, and not at the end of the year.

This brief description of the themes from the Phase 1 data can be distilled to being issues of time, change, trust and reliability. However, the data also uncovered the beliefs and experiences of the teachers far beyond merely answering the questions presented to them. Further, my own discussions with the teachers gave an additional dimension to their responses. This guided the approach I took when the teachers began to integrate digital technologies into their practice in the second phase of the research.

Phase 2 involved setting up a professional learning team of six teachers, all of whom had volunteered to participate. They were from a range of subject areas. These teachers participated for a period of 12 months, integrating digital technologies into their classrooms. Some of what they tried was not necessarily very new at the time, but was new for them.

Regular meetings were held over the 12-month period. Relationships developed as the group provided support for each member, applauded success and sympathised with failure. Each teacher was asked to keep either an electronic or print journal through the course of the research. As it turned out, none of them did this very much at all, preferring to have discussions at meetings.

Phase 2 concluded with three of the teachers, Annabel, Elizabeth and Dana (pseudonyms), continuing their participation for a further six months. We met as a team each fortnight, thus providing further opportunities for discussion of and support for the use of digital technologies in their classrooms. Each of these teachers was interviewed on two occasions, approximately ten months apart. These interviews, using semi-structured questions, provided a detailed record of the journey and many insights into the 'teacher self' of each.

The Emerging Story

In the data gathering phases, the teachers revealed their beliefs and experiences relating to integrating digital technologies into classroom practice. I have interwoven what emerged from the data with the literature to present the key findings of the research.

Teachers need to comply with requirements from sources external to themselves much of the time, but what of the internal influences and their impact on practice? Accepting the argument that teachers put themselves into their jobs (Day, Kington, Stobart, & Sammons, 2006), identity appears central to understanding why the teachers responded in the ways they did.

Identity and beliefs

Identity is a way of being. Palmer (2007) believes we teach who we are, so there is value in recognising the ways in which teachers can effectively incorporate the

... we teach who we are ...

personal self and professional identity into teacher identity (Alsup, 2006). This sense of identity can be seen as a key variable to motivation and preparedness to change (van Veen, Sleegers, & van de Ven, 2005). Tensions between her personal and professional selves arose for Elizabeth because she rarely used technology at home. To use it in the classroom was a challenge for her.

Teacher identity develops through articulation of personal beliefs about being a teacher. It is multi-faceted and impacted by social and cultural factors. Professional identity is a 'chorus of voices' with multiple sub identities and the potential for conflict within these. Teacher identity may be seen as an internalised view and one of how others see them. Teachers' dedication can make them vulnerable to the expectations of others (Day, et al., 2006) and result in them compromising their own beliefs. Dana believed she was a good teacher but experienced anxiety as she was waiting to be tapped on the shoulder and asked why her practice had not changed to incorporate the use of digital technologies.

Emotions

Emotions play a central role in identity formation (Zembylas, 2003). They are central to the "complex reality of teaching" (Nias, 1996, cited in Kelchtermans, 2005, p. 996). The teachers' beliefs were expressed with the language of emotion both positive and negative. Sara and Patricia described their enthusiasm and keenness for digital technologies and this appeared to translate into frequent use in the classroom. Emotions exhibited by the teachers in this research often included frustration and feelings of pressure when using digital technologies and managing expectations. Dana spoke of "another brick in the backpack" to describe this. When the teachers were unable to meet the requirements, some of them experienced guilt and anxiety. What if they were seen using chalk and talk?

Self-efficacy

Teachers' beliefs in their own capacity to maximise student success has a strong link with student achievement (Goddard, Hoy, & Hoy, 2004; Tschannen-Moran & Woolfolk Hoy, 2001). Bandura (1993) defines self-efficacy as "a cognitive process in which people construct beliefs about their capacity to perform at a given level of confidence – it is difficult to achieve much while fighting self-doubt" (p. 118). Such beliefs dictate the degree to which people will persevere.

The teachers' beliefs about the use of learning technologies in classroom learning were shaped by experience (Ertmer & Ottenbreit-Leftwich, 2010; Tschannen-Moran & Woolfolk Hoy, 2007). Good

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experiences are necessary if teachers are to adopt learning technologies, since technology self-efficacy is particularly affected by experience. Bad experience can be an impediment to adoption, evidenced by Louisa who had many technical problems when she tried blogging with her class. She eventually gave up and withdrew from the study. Feelings of control also have an impact of self-efficacy (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998) and this was also a factor for Louisa.

Self-efficacy is impacted negatively by change at first but this diminishes as skills are acquired and strategies developed (Tschannen-Moran, et al., 1998; Wheatley, 2002). Participation in the second phase of the research presented opportunities for positive experiences and improved technology self-efficacy and consequently

adjusted pedagogical beliefs. This certainly seemed to be the case for Elizabeth – here I present her story in brief:

You can't just be a Luddite - Elizabeth's tale of teacher self

In the classroom Elizabeth removed herself to the corner of the room farthest from the interactive whiteboard the class was using. When I pointed this out later, she said, "Yes! I let you into the scrum. I hung back in the coach's position saying nothing". Elizabeth was very impressed by the students' cleverness with the interactive whiteboard, yet some of them were quite ineffectual in their use. Elizabeth was so intent on avoiding close involvement that she failed to observe this. At the beginning of Phase 2 of the research, Elizabeth was very candid about her lack of ICT skills. In reference to Prensky's (2001) concept of digital natives, she said, "I'm not a native. What is the other thing you can be?".When I told her this was an immigrant, she laughed loudly. "No, I'm not an immigrant. I am still in the home country and waving other people goodbye as they get on the ship." Elizabeth professed to using technology as little as possible as she saw computers as gadgets, the use of which was akin to playing games: "it's that tinkering, that playing around with stuff and I don't do that".

Elizabeth's comment "I thought I could be your failure person" was made at our final interview, when I asked her why she decided to volunteer for the study. She thought that participation might force her to extend herself but she also believed she could provide me with a contrast to those who were more adept at using technology. She saw her identity as "residing in something other than technology. That's why it doesn't worry me that I don't have any expertise in it". Being an English teacher, she believed her identity was "completely in the literal world of the book". She went on, however, to contradict these views by telling me she was prepared to entertain the possibility of her identity being expanded to include the technological world, saying, "you can't be a Luddite". I began to think that, in fact, she was comfortable with her 'Luddite' self. What didn't worry Elizabeth was the possibility that she might look foolish in front of her students, which indicated she was prepared to be vulnerable (Day, et al., 2006; Kelchtermans, 2005). "This [technology] is just another way of looking foolish, really, that I can embrace [laughs] . . . wholeheartedly."

Trust

The best way you can find out if you can trust somebody is to trust them (Hemingway).

Trust emerged as an issue in the first part of the research. One teacher, Charlotte, in talking about student use of computers in class said, "Trust is a huge issue here". Other teachers made similar comments: "they're clever and can hide things", "they have too many temptations". Trust continued to emerge as a theme throughout the research.

In an uncertain, ever changing world trust is a vital commodity (Thompson, 2005), a component of social capital that can impact upon the capacity of an organisation (Lambert, 2007; Uslaner, 2002). It is necessary if people are to work together and this working together can itself build trust (Reina & Reina, 2006). Hoy & Tschannen Moran (2003) have done much writing on the topic and I present their definition:

Trust is an individual's or group's willingness to be vulnerable to another party based on the confidence that the latter party is benevolent, reliable, competent, honest and open (p. 183).

Trust can be individual or collective and it matters in schools, as it is a vital resource when change is required (Bryk & Schneider, 2002; Kochanek, 2005; Louis, 2007). Yet, Hargreaves and Fink (2006) argue that it is "the first fatality of imposed reform". Building trust takes time and occurs incrementally. Strong trust increases the likelihood of teachers being prepared to take risks and embrace change (Reina & Reina, 2006). Trust is also a vital ingredient for successful collaboration because, according to Uslaner (2002), "trust links us to people who are different from ourselves, it makes cooperation and compromise easier: (p. 190).

In Phase 2 of the research, the teachers believed strongly that they needed the trust of their students before they could contemplate trying new learning technologies. Dana, Elizabeth and Annabel all saw trust

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as something that had to be built slowly as a prerequisite to new practice in the classroom. All three perceived

that their students exhibited a degree of trust towards them by accepting the changes in what was happening in their classes. Elizabeth introduced blogging with a very brief discussion on appropriate behaviour and then let the students loose, as she was convinced that there was reciprocal trust.

Relationships

Strong relationships matter because they are necessary to build capacity in a school (Lambert, 2007). Teachers need to work effectively together and with their students. Relationships developed between the teachers in the Professional Learning Team as they worked together over time. Group meetings often produced examples of caring and concern (Witherell & Noddings, 1991), support and affirmation. The result was positive attitudes and perseverance. Annabel on occasion expressed concern that she was not doing enough to help me with the research. At one meeting, she said to me, "you've been interested – it's been nice to think that somebody actually cares . . . and is actually noting that I am putting some energy into what I am doing". Elizabeth was delighted with the "ongoing relationships with people in the school where you can go, well, what are you doing now, how has that been going?".

There were unexpected consequences including the building of relationships between the students. Elizabeth's class worked on a book review blog and one student leaving to move to another country chose to farewell her classmates by posting to the blog.

Goodbye

Hey i know that this is a reading blog, but i thought id let people know that i am moving to Africa next week!!!!!! i'll miss u guys heaps!!

Change

Much has been written about change in schools. Hargreaves (1994) points out that people are always wanting teachers to change. When it comes to change involving digital technologies, keeping up has been likened to hitting a moving target (Ertmer & Ottenbreit-Leftwich, 2010).

The teachers in phase 2 had essentially signed up for change. As members of the professional learning team, they were involved in the decision-making regarding which digital technologies would be tried in their classrooms. However, this didn't always guarantee changes to classroom practice. Dana was willing to try a new digital technology once or twice but she sometimes found it easier to revert to what she called the old way, or what Sannino (2008) would describe as the dominant activity. Dana saw a need to change habits if she was to successfully maintain the new practice. Annabel believed that she needed to be eased into change, but explained, "we've always got to look forward".

Time

Time is seen as a major inhibitor to the adoption of digital technologies (Mumtaz, 2000, cited in Somekh, 2008). Certainly, the teachers believed that if time was not available when required, they had sound reasons to avoid changing their pedagogical approach. They also perceived the allocation of time to be a commodity beyond their control, which suggests the need for a more postmodern approach (Hargreaves, 1994) where teachers are given more responsibility as to when time is available and the ways in which it might be used.

Time is seen as a major inhibitor to the adoption of digital technologies.

The timing of when things were done had a negative impact on occasions. Examples of this were professional learning sessions held at the end of the day when teachers were tired, new online systems being

introduced at report writing time. If the teachers deemed the timing inappropriate, they displayed little enthusiasm and desire for participation.

Implications of the research

The discussion above has focussed on the themes that emerged from the research data. The threads of this discussion are now drawn together in order to present the key findings in a context that is useful to those in school libraries.

What made a difference to the teachers?

- The presence of strong trust and relationships within the team and with their students
- Being allocated time, which was seen as recognition by school leaders of the teachers' efforts teachers not necessarily from within their own subject area
- Recognition of their increasing technology self-efficacy
- Seeing and being seen as learners
- Being seen as models for others

There is merit in school leaders regarding the teacher as an individual whose personal and professional identities can sometimes be in conflict and thus create tensions. Also to be considered are:

- The importance of acknowledging personal identity
- The value in recognising the impact of levels of self-efficacy, particularly technology self-efficacy, on teacher practice and willingness to embrace change in practice
- The benefits of showing trust by encouraging risk-taking and providing support
- A different approach to the allocation of time where teachers are given more control of their time for learning

The challenges for those in school libraries

- How teachers view time has a major impact, particularly seen in the context of the crowded curriculum, increasing expectations upon the work of teachers (realities of practice)
- How can our collaborative work with teachers assist them in viewing change in positive ways?
- How do we work most effectively within the broader structure of our particular schools?

Conclusion

In schools, we are continually confronting the pressures of change. It is worth recognising that each teacher will deal with it in an individual way. It may be productive to factor this in to how each teacher is viewed and how those of us in school libraries work with them. It is

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possible that we as teacher-librarians may sometimes find ourselves reacting in similar ways. We all bring ourselves to what we do and how we do it. To work effectively with students, the critical step for us is to work productively with their teachers. In the collaborative work we do with teachers, trust and relationships are at the core. Understanding and acknowledging teacher responses will lead to stronger trust and relationships. In the end, this is all for the benefit of the students and their learning.

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