Embracing emergent technologies and envisioning new ways of using them for literacy learning in the primary classroom

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ABSTRACT: *In this narrative, Sue Halsey, a New Zealand primary school teacher, taking her cue from Leu and Kinzer (2000), describes her own "envisionment" as she realizes a number of new possibilities for literacy and learning in her classroom utilizing a range of new (including Web2) technologies. In doing so, she mediates between her two "Jiminys", one of whom is a lover of books and literature, and the other who recognizes a need to take a broader view of literacy. Based in the development of a class website, she describes the use of podcasts, online publishing and blogs as new ways of bring the world into her classroom, and taking her classes learning out into the world.*

KEYWORDS: *Literacy and learning, Web2 technologies, podcasts, bookchat, online publishing, teacher envisionment.*

Reuben burst into the classroom on Monday morning, waving his school library book in the air and asking, "Can I please do a book review?" Reuben, a typical six and a half year old boy, is not usually very excited about reading, or writing, or in fact anything remotely resembling hard work, so what had got him so excited?

As teachers, we can no longer ignore technology. It is here to stay. We can no longer wonder what impact technology will have on literacy, as the nature of literacy is rapidly and continuously redefined by changing technologies in this information age (Leu, 2000). We cannot bury our heads in the sand and try to ignore technology; likewise we cannot sit passively while technology transforms literacy. We must embrace technology and envision new ways of using emerging technologies in our classrooms. Leu and Kinzer (2000) say "envisionments take place when teachers, children, and others imagine new possibilities for literacy and learning, transform existing technologies to construct this vision, and then share their work with others" (p. 117).

Often this happens very naturally and seamlessly, with very little consideration for underpinning theories, as teachers "envision a better world and then act on that envisionment, regularly transforming Internet technologies and constructing new instructional worlds for literacy and learning" (Leu and Kinzer, 2000, p.118). I am one of those teachers, and it is my acts of envisionment over the course of the past ten-week term that had got Reuben so excited. In this article I will describe some of the envisionments that have taken place in my classroom and I will be forced to look past my teacher's intuition and sheer enthusiasm and delve a little deeper into the theory behind the practice that occurred seemingly naturally.

As a teacher of young children, and with passions for both literacy and ICTs, I am always looking for ways to connect with my learners and incorporate learning experiences that reflect their interests and pleasures. However, it is as if there are

twin Jiminy Crickets sitting on my shoulders, engaged in constant dialogue behind my head. They are not arguing; I like to think of it more as healthy discussion, as they try to come to some sort of agreement about the importance of their respective topics of interest. One Jiminy, who has a love of books and literature, argues for the need to develop a similar life-long love in children, some of whom have never been exposed to fairy tales, nursery rhymes or Dr Suess. The other Jiminy knows there is a need to take a broader view of literacy, that now more than ever before we need to think about literacy learning in the context of an ever-changing social and cultural environment (Ministry of Education, 2003). This Jiminy knows the children have already been exposed to a broad range of tools and text types in their out of school lives (Beavis, 2001; Clay, 2005; Godwin-Jones, 2005; Wenmoth, 2007), that they "view technology as a natural part of life and expect this technology to be used in their learning processes" (Northcote et al, 2007, p.17).

Both Jiminys agree on the importance of student motivation and engagement, of catering to a wide range of learning styles and of involving parents as partners in their children's learning. No wonder it is a healthy (and continuous) debate as the viewpoints converge. Academics have referred to another "convergence", that of literacy instruction and Internet technologies, arguing that as the Internet enters our classrooms and permits us to envision new literacies, this convergence is reshaping the nature of literacy instruction at an increasingly accelerating rate.

NEW WINE, NEW WINESKINS

So back to Reuben and his classmates. Over the past term I have, together with my class of six-year-olds, developed a class website. This was something I had been pondering for a while, as I toyed with the idea of introducing second-generation, web-based technologies into my classroom programme. However, I was aware of the need to anchor the use of these technologies to intended learning outcomes and overriding philosophies, or I would risk producing little more than "bells and whistles" (Northcote et al, 2007), or "old wine in new bottles" (Lankshear and Knobel, 2003). Sword and Leggott (2007) offer their "seven principles for education the ne(x)t generation" in a recent edition of a journal of online education. Of the seven, I would argue that as many as six can be achieved in the primary classroom, through the planned and thoughtful integration of second-generation web tools. They are:

- relinquish authority
- recast students as teachers researchers and producers of knowledge
- promote collaborative relationships
- cultivate multiple intelligences
- foster critical creativity, and
- craft assignments that look both forward and backward.

The remaining principle, encourage resilience in the face of change, is perhaps more applicable to the teacher. Whilst I aspire to these principles in my teaching practice, my key foci in developing a class website were somewhat simpler and more naïve, perhaps reflecting the busy life of the teacher at the chalk-face, and the need to simplify and prioritise. They could be summarised into four main areas; student

motivation; metacognition; bringing the world into our classroom; and taking our learning out into the world.

Our website grew (and will continue to grow) gradually, but each component was thought through with respect to these foci, and also reflected the needs, interests and abilities of the children. It also reflected the direction that my own personal professional development was beginning to take. During the course of my recent postgraduate studies I had become interested in podcasting. The term podcasting was coined in 2004 and is a combination of the words "iPod" and "broadcasting". Easy to produce and building on students' existing interests and abilities using new technologies, podcasts were soon embraced by the educational ICT fraternity, some seeing them as the "next big thing" (Northcote et al, 2007). I was eager to attempt podcasting with my class in a meaningful context and a class website provided an ideal forum for the presentation of podcasts to an audience.

Hence the first component to appear was our "Podcast" section, where each Friday two children reflect on the week's events and learning and produce a podcast which is then uploaded to our website. In my classroom our podcasts have served several purposes. The whole class participates in a brainstorm reflecting on what learning has taken place in the classroom during that particular week. Generally we have been able to move past simply recounting events and surface features and into deeper metacognition. Once all ideas have been tabled, the two children chosen to do the podcast (simply being chosen is a huge motivation for participating in the metacognition process) engage in the shared writing process of scripting their podcast. As the term has progressed, less and less scaffolding has been required to complete this aspect. The children then hone their reading, speaking and listening skills as they record their podcast. They then review, edit, refine and enhance their podcast in a piece of recording software, and as they do, they make links to similar editing in the writing process.

The process could end here, but by uploading the podcast to the Internet, I am providing the children with an audience, and therefore a purpose. It is also my intention to use the website as a window into my classroom, providing parents with a link to their children's learning in school, enabling them to participate as partners in the learning process. To date, the podcasts have been well received by parents. An excerpt from a recent email from a parent says: "I love checking the website to see what you have been up to. No wonder you come home from school tired some days with the amount of work and fun you have in a day". Another parent comments: "I think it's so cool that I can see what Skye has been doing at school, because I am not always able to come in and see all of her good work because I have to be at work." Of course, providing a window into the classroom via the Internet means that not only parents, but also other educators have a bird's-eye view, which some teachers could find threatening. On the contrary, I am proud and somewhat motivated by the fact that my principal has subscribed to our podcasts and enjoys using them as a way of keeping abreast with the teaching and learning in my classroom.

The next component of our website to appear was the "Exciting Writing" section. My main purpose in including this section was to provide the children with an audience, and therefore a purpose and increased motivation to produce quality writing. Turbill (2003) says: "finding authentic purposes for children's writing is another difficult

challenge for teachers" (p. 9).   Using Internet technologies may be one way to overcome that challenge, since providing the opportunity for a real audience for writing helps create an authentic purpose.   Writing for a real audience is said to contribute to more thoughtful content and structure of the writing (Godwin-Jones, 2003; Oakley, 2003).   Anticipating and receiving feedback from an authentic audience can also provide a purpose for writing and add to the motivation of the writer (Huffaker, 2005; Jones, 2004; Ministry of Education, 2003; Wells, 2006).   A study by Karchmer (2001) of exemplary teachers using the Internet in literacy classrooms argued that publishing students' writing on the Internet extended the audience beyond that of the teacher and the classroom walls and concluded that "students' motivation to produce quality written work increased when they knew it would be published on the Internet" (p. 458).   This has certainly been my experience thus far.   Although it has at times been necessary to cultivate an audience and incite feedback, the children's notion of a perceived worldwide audience and the very act of publishing on the Internet have seemed to provide sufficient purpose and motivation.

Perhaps a combination of the two previously discussed components of our website, was the third to appear, the "Events" component.   This provides a further window into the recent memorable events that have occurred in our classroom, the recounts of which have all been written about by the children.   The value of an easily retrievable record of the students' work can be seen when the children use the classroom computers to access this section, continuing to reflect on their earlier learning.

Two more recent additions to our website have been the "Word Power" and "Book Reviews" components.   It was the latter that had got Reuben so excited.   The "Word Power" section was intended to provide the children with a stimulus to search out interesting words as they engaged with books, and then share those words with others, over time creating an online word bank that they can access and use as they write. For example, Britney liked the lyrical sound of "clickety-clack", a phrase that she found on the back of a library book, Skye liked the way the word "huggly" made her feel.   A colleague emailed the class with the words "murky, gurgle, flicker", encouraging them to enter a local poetry competition, so those were added to our very own, online thesaurus.

The "Book Review" section again used podcasting technology, but this time to increase the children's depth of understanding of the books they were reading as well as promote reading among their peers. Guthrie (2001) says: "Children who like to share books with peers and participate responsibly in a community of learners are likely to be intrinsically motivated readers" (p. 2).   By the time I introduced these components, the children were already familiar with all the other components of the website, and over half of the children in the class had participated in a podcast or had writing published on the website.   They were comfortable with the now weekly routine of adding to the content of our website, most had visited the website with parents at home and they were developing an awareness of audience.   So, as I introduced these two new components of our website, I turned the onus of creating content over to the children.   I told them that I would help them as much as they needed, but that we would not be routinely adding to these components as a class; it was up to them to come to me if and when they were ready to contribute. Beldarrain (2006) says one way to afford students more control is to integrate second-generation, web-based technology.   These technologies support a constructivist approach to

teaching and learning, and are most effective when students have autonomy over the process (Beldarrain, 2006; Fountain, 2005).

After introducing the idea, and briefly demonstrating an impromptu book review in front of the class using a book they knew well, I told the children they should come to me when they had chosen a book to review, a partner to interview them and had started writing a script. I have been pleased with the way the children have embraced the idea, working in pairs to write scripts during their spare moments in class. It has been rewarding to hear six year olds discussing amongst themselves the characters, settings, plots, problems, solutions and endings, and making recommendations to their audience as to who might enjoy reading their book. Moments such as the Monday morning that Reuben burst into the classroom asking to do a book review make it all worthwhile.

Further ideas for the development of our website continue to gather momentum as they roll around in my subconscious. The next idea on the agenda that developed over the holiday break between terms, was to each day send home a soft-toy "buddy" with a different child, with a notebook and digital camera to record the buddy's "experiences" in the form of a blog, or online journal. In addition to purposes already discussed, such as the increased audience, sense of purpose and the added motivation of children owing to having their writing published on the Internet, I had hoped that this next envisionment would further enhance parental involvement in the children's learning at home. Additionally, it might help the children to step outside of their very egocentrical worlds and develop a richer understanding of the diverse world in which they live (Leu & Kinzer, 2000). I purchased a cheap but loveable soft-toy and set him up in a small, sturdy bag containing an old but trustworthy digital camera, a sheet of instructions for the children and another of explanation for their parents. Also in the bag were pens and a notebook, in which the children would write about their after-school experiences from the perspective of the soft-toy. To date, our new classmate Timmy the Tiger has been home with all twenty-six children in my class, and is into his second round of visits. Through Timmy and his blog, the children have developed a deeper understanding of their classmates' lives outside school. They have been introduced to gymnastics, dance and Tae Kwon Do lessons. They have found out about soccer, rugby and golf games and what goes on at after-school care. The secret lives of teachers have also been revealed, dispelling the myth that we live at school. Hopefully, I can continue to envision new ways of bringing the world into our classroom, and taking our learning out into the world.

Other class activities that have attempted to serve this purpose have been based around emailing and web-based discussions. As well as replying to emails from parents, teachers and other viewers of our website, we have been emailing another Year 2 class in New Zealand, as they investigated games that children play in schools. We have also been participating in Book Backchats (otherwise known as book raps) with similar aged children from around the country. This involves engaging with a text in depth in order to respond to questions and prompts posted by the Backchat coordinator, and participate as part of an online community of learners. Unsworth et al (2005) argue that the combination of online guided learning and in-class teacher support ensures that book raps result in increased depth of readers' literacy understanding. They further state "as a direct result of their interactive design, book raps have stimulated children's enthusiasm and enjoyment of books, bringing about

more complex modes of communication and therefore more complex appreciation of texts" (Unsworth et al, 2005, p. 44). During our recent Book Backchats, the benefits for my class and myself have been well worth the minimal effort required to participate. It has been refreshing to have the children engage in conversations about a book with a teacher other than myself. They have enjoyed going more deeply into a text than the usual reading of a picture book allows, looking more closely at the illustrations and thinking more deeply about the characters and their stories. As a result of this deeper understanding, the Backchats have also sparked great opportunities for the children to create their own writing and art.

CONCLUSION: BACK TO THE FUTURE THROUGH TEACHER ENVISIONMENT

Our school regularly hosts visiting groups who come to see how we approach teaching and learning, often looking particularly at thematic learning and integration of ICTs. After sharing my recent forays into Internet technologies with one group, a teacher approached me over coffee and said that she had enjoyed seeing our website, but how did I fit it all into the weekly programme and did I not think literacy and numeracy were important? Needless to say, I nearly fell off my chair, given the amount of thought and energy that went into designing the whole website and associated learning experiences based around literacy learning. I was, however, reminded of Turbill's (2001) research (cited in Turbill, 2003) that uncovered four main points regarding teachers of young children and technology; teachers

- "felt guilty about letting children "play"" with technology – "activities didn't appear to be "real" literacy learning"
- "had a narrow definition of literacy that included only print and paper-based texts"
- "lacked confidence in their own abilities to use digital text (let alone create them) and to teach their students to use them"
- "lacked the time to play with the current software or to search the internet for ideas and information" (p. 2).

While many teachers, perhaps constrained by their own limited print-based understandings of literacy, are feeling inadequate or under-prepared to integrate a range of technologies into the literacy or English classroom, others are "beginning to acknowledge the need to learn how to use a range of new technologies that allows for an expanded network of communication and intellectual exchange" (Snyder, 2001, p.112). I would argue, however, and others concur, that using web-based technologies is an ideal entry point, as they require little technical expertise (Fountain, 2005; Huffaker, 2005; Valenza, 2006).

Leu (2000) states: "clearly the literacy of yesterday is not the literacy of today, and it will not be the literacy of tomorrow" (p. 744). Leu et al (2004) further argue that "new literacies, whether intentionally or unintentionally impact literacy instruction in classrooms" (p. 1). So where to from here for classroom teachers, professional development and future research? It is likely that children, rather than the teachers, may have more sophisticated knowledge of new technologies, forcing some teachers to undergo a pedagogical shift from expert to participant/facilitator (Leu and Kinzer,

2000). Technology will likely change more quickly than any individual can hope to keep up with, so it is also likely that literacy learning will be more dependent on collaborative and co-operative learning activities and other social learning strategies (Leu, 2000; Leu and Kinzer, 2000; Leu et al 2004), necessitating further pedagogical change for some. So not only will professional development need to continually support teachers technologically as new technologies appear; it will also need to address teachers' instructional beliefs and philosophies (Leu, 2000; Leu and Kinzer, 2000). Research time and resources could be perhaps less directed towards analysing the benefits of particular technologies per se, which will have undoubtedly been made redundant before a consistent body of research appears. As Leu (2000) argues, we already know these technologies will have an impact on our children's "success at life's opportunities" (p. 762) so perhaps research time and energy could be better applied to understanding teachers' desires and abilities to envision new uses for emerging technologies in literacy learning. Perhaps we should be more trusting of exemplary teachers' intuition, professional knowledge, continual reflective practice and passion for change and seek to learn from this?

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