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## [Pedagogies of Design and Multiliterate Learner Identities

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*Abstract: In an era of multiliteracies, teaching and learning have become knowledge performances at multiple levels. Instead of a singular, linear focus upon print technologies, the techno-oriented philosophy of teaching aims at providing a rhizomatic network of texts where there is a close link between, and often an overlap of, different designs—linguistic, visual, spatial, and gestural—to construct the multiliterate learner. In this paper, I discuss the role of multimodal literacies in a primary classroom, affirming the role of multiliteracies and decentring the pre-dominance of linguistic at the cost of other designs. While the print media are acknowledged as significant to literacy, the multimodality of print is enhanced through visual and spatial design (Kenner, 2004). Through graphic examples of ICT applications of designs in a primary classroom, I demonstrate that students are operating through multitextual and digitextual (Everett, 2003) practices. What follows is the complex positioning and re-situating of teacher and learner identities engaged in learning through the knowledge processes of experiencing, identifying, applying and critiquing concepts (Kalantzis & Cope, 2004). In particular, I argue that within the diversity of present day classrooms, the digital oriented, multiliterate learner is implicated in constant identity construction by drawing upon macro and micro social practices. I conclude by reiterating the significance of new technologies and new literacy practices as essential to the construction of new learner identities.*

*Keywords: Multiliteracies, Designs, Learner Identities, Social Practice*

## Introduction

Present day literacy involves more than reading and writing skills; thus, literacy in current times has been appropriately defined as a social, cultural practice (Freebody & Luke, 2003; Gee, 1996; Kalantzis & Cope, 2000b; Lankshear et al., 1997; Lankshear & Knobel, 2003; Moll, 1994). Kalantzis and Cope (2000b, pp. 142-145) declare that literacy cannot be formulaic in a diverse, pluralist society and advocate literacy models that attend to the cultural and critical aspects of literacy. The four resources model (Freebody & Luke, 1990), the three dimension (3D) model (Green, 1988; see also Durrant & Green, 2000), and the multiliteracies model demonstrate that literacy is a complex process of text participation and meaning making, a site where learners engage with texts as critical analysts and problem solvers. Further, the

models illustrate the importance of different modes of communication, particularly new technologies that provide new challenges and necessitate new literacies. As the New London Group (2000, p. 9) argues, "literacy pedagogy now must account for the burgeoning variety of text forms associated with information and multimedia technologies". In present day classrooms it is not unusual to find children critically engaged with both conventional and new technologies (Unsworth, 2002) and, as Durrant and Green (2000, p. 89) observe, "account needs to be taken of a profound media shift … from print to digital electronics … for learning and teaching".

In this paper, I illustrate the productive shifts in literacy practices achieved by a Grade One teacher (Julie[i]) when she combined traditional print literacy with new technologies to produce a digital story book, thus providing a novel learning experience to her students. The task of developing a digital story book based on fairy tale characters, and the creative involvement with different design repertoires and multimodal literacies, enabled Julie to move beyond conventional texts to new hybridized texts; in short, to move from the designed, designing, to redesigned (The New London Group, 1996, p. 74). Further, I discuss how by engaging in the four knowledge processes (see Kalantzis & Cope, 2004) through substantive conversation, higher order thinking and critical perspectives (Department of Education, Queensland, n.d), Julie changed the dynamics of her class in multiple ways. I conclude by discussing that employing multimodal literacies allowed Julie to exploit the conceptual perspectives and alternative learning methods of her learners and, thereby, enhance their learning.

**Technology and learning**

Alterations to the social fabric of society and the development of new forms of digital technologies have brought about new semiotic modes (Kress, 2003; Luke, 2003). Digital technology, as observed by Kieffer, Hale and Templeton (1998, p. 146), "has the potential to change the way individuals generate, update, recover, link, and process information" (see also Lankshear et al., 1997, Luke, 2000, 2003). Revolution in communication and information technology has led to a significant overhaul of the modes of communication in a classroom. As Luke (2000, p. 34, see also 2003, p. 398) observes, traditional notions of classrooms will be transformed as new technology oriented learning along with print based modes become central to learning experiences of young people. Due to the digitization of knowledge through information technology (ICT, hereafter), curriculum theories underlying literacy practices are being challenged (Lankshear & Knobel, 2003). As these authors observe:

> Rethinking epistemology in a digital age might involve thinking of it as practices of knowing that reflect a range of strategies for assembling, editing, processing, receiving, sending, and working on information and data to transform diverse resources of 'digitalia' into 'things that work'. (p. 173)

According to the four resources model (Freebody & Luke, 2003), the 3D model (Durrant & Green, 2000) and the multiliteracies model, the procedures of learning involve decoding and meaning making in a complex environment of print and digital literacies. Consequently, teachers and students have to become critically literate in the semiotics of digital technologies that enable meaning making (Burnett et al., 2006; Unsworth, 2002).

The present day learner surrounded by multiple interrelated semiotic modes and multiple discourses needs an exposure to multiliteracies—particularly so in the present "landscape of communication", where the different modes of linguistic, visual, and spatial are blurring (Nixon, 2003, p. 408; see also Kress, 2000b; the New London Group, 2000). This, in turn, has immense impact on how children are educated.

In recent years, literacy educators in Australia, as elsewhere, have transformed their approach to teaching by incorporating digital technologies. The vast set of resources available through technology has meant that teachers can employ different resources to promote student learning and enhance their potential for growth. As Unsworth (2002, p. 62) observes, instead of being "displaced by computer text, conventional literacies are maintaining a complementary role as well as being both co-opted and adapted in the evolution of our textual habitat".

However, Miller and Olson (1998, p. 351) offer a note of caution: technology and software, while it is designed to promote learning, could also interfere with learning (see also Lankshear & Knobel, 2003). Thus, the challenge facing most teachers in Australia is to create a tapestry of multimedia and multimodal literacies to provide a holistic and productive learning experience, while accommodating the immense cultural diversity in their classes. To overcome this challenge, teachers have to adopt radically different ways of approaching learning and assessment, and attend to the "increasing complexity and interrelationship of different modes of meaning" (The New London Group, 2000, p. 25) through multimodal literacies and multiliteracies. As noted by Lankshear and Knobel (2003, p. 11), the pedagogy of multiliteracies is

particularly suited to present day learning environments because it focuses on the cultural and linguistic diversity of learners and on new technologies.

In advancing the idea of multiliteracies in 1996, the New London Group focused on the 'what' and 'how' of pedagogy, thereby attending to the core aspects of learning. In determining 'what' constitutes the pedagogy of multiliteracies, the New London Group examined metalanguage essential to the concept of design in the production of texts. The five design elements considered were: linguistic, visual, audio, spatial, and gestural design. As highlighted by the New London Group (2000, p. 24), an objective of the group was to develop "a metalanguage that describes meaning in various realms". According to the authors, metalanguage enables the development of a "tool kit for working on semiotic activities" (p. 24). The concept of design is inclusive of the available designs, the transformation of these designs through use and the subsequent redesigned forms that emerge (see The New London Group, 2000, p. 29). The 'how' of multiliteracies pedagogy involves the complex cyclic interaction of four factors: situated practice, overt instruction, critical framing and transformed practice. Situated practice is based on the lived experiences of the world learners bring to learning, while overt instruction is the means by which the teacher engages in "active interventions" (The New London Group, 2000, p. 33) to scaffold learning and help students employ the repertoires of design. Critical framing enables learners to make meaning of the design repertoires by relating these to their social contexts, and to apply the designs creatively and in innovative ways. In transformed practice students are able to apply and re-create design elements successfully (see The New London Group, 2000, p. 31).

The New London Group, further, affirms that by incorporating the metalanguage of ICT complex texts are produced, ones that incorporate different designs such as print, visuals, animation and audio designs (Jewitt, 2005, p. 316). The amalgamation of technological resources produces complex texts, therefore "multiliteracy of digital electronic 'texts' is based on notions of hybridity and intertextuality" (Luke, 1997, p. 11). Luke observes that in making meaning from different design elements learners draw on a diverse range of knowledges of "traditional and newly blended genres or representational conventions, cultural and symbolic codes, as well as linguistically coded software driven meanings" (ibid).

The concepts of intertextuality, multimodality, hybridity and multiplicity are deeply entrenched in multiliteracies. These concepts illustrate the notion of complexity and continuity from the old to the new literacies, and also demonstrate how conventional knowledge fields can be used to create new texts and new genre blends through the concept of design. The concept of 'intertextuality' draws from Kristeva (1986) and, for the New London Group (1996), signifies complex interrelationships of texts, and modes of engaging with texts from print to digitized forms. Hybridity, as the New London Group (2000, p. 30) explains, is "articulating in new ways, established practices and conventions within and between different modes of learning". As the New London Group (2000, p. 30) observes, hybridisation includes "multifarious combinations of modes of meaning cutting across boundaries of convention and creating new conventions".

Drawing on intertextuality, Everett (2003, p. 6) develops the concept of digitextuality which is intended to address the "continuities and ruptures existing between traditional ('old') media and their digitial ('new') media progeny and,

especially, how new media use gets constructed". Everett argues that digitextual

practices are concerned with intertextual reading as well as the associated aesthetics,

discourses and rhetoric that come with digital technology (Everett, 2003, p. 7).

Importantly, digitextual practices conflate rigid distinctions between literacy related

activities and the interactive distance between the teacher and learner (see Everett,

2003). As noted by Carrington and Marsh (2005),

> These 'digitextual practices'… are blurring the distinction between writer and
> reader, producer and consumer and require a complex range of skills,
> knowledge, and understanding, a fact which is often overlooked by those
> who seek to suggest that these practices are inferior to traditional literacy
> pursuits. (p. 281)

New literacies require "new learning" that is an agent of change and is creative

(Kalantzis, 2006, p. 7). Thus, extending the pedagogy of multiliteracies, Kalantzis and

Cope (2004) suggest designs for learning that tap into the knowledge processes that

are inclusive of the diversity, lived experiences and creative practices of learners. The

four knowledge processes of experiencing, conceptualising, analysing and applying

(Kalantzis and Cope, 2004, p. 64) ensure that students have ownership, thereby

signalling a shift in identities from passive to proactive learners. In experiencing the

known and the new, students bring their knowledge about concepts and are

immersed in new experiences. In conceptualising by naming and theorising, students

define, apply and relate concepts together; in analysing functionally, students engage

in activities that provide cause/effect, and understand how things operate; in

functioning critically, students uncover motives, intentions, or purposes and points

of view of concepts. Further, in applying their new knowledges appropriately

students learn of suitable contexts that correspond with their knowledge; in being

creative or innovative they extend their learning in new ways and transfer it to new contexts.

These knowledge processes, in turn, enable teachers to engage with workable techniques and reflect over their practices. To illustrate the application of the knowledge processes and the pedagogic process of multimodal literacy activity, I now turn to my data.

**Changing pedagogic practice**

Research by Labbo (2000) and Labbo et al. (2000), explored the impact of computers, digital software and CD ROMs on young children learning. They found that a teacher can find ways to "use the technology to support children's literacy needs and to enhance the thematic units and literature-based activities occurring in the classroom" (Labbo et al., 2000, Lessons Learned and Promising Directions section, para. 1). My research extended such work by examining literacy as a social, cultural practice and by exploring how reading and writing through digitial texts leads to new modes of literacy. Observing teachers actively negotiating ICTs in a primary grade was a way to situate my research and gain a deeper perception of how multimodal literacy and new technologies are integrated in learning.

Data was collected during a 13 week semester of observation of a Grade One class that consisted of 28 students at a suburban school in Australia. The voluntary position of being a teacher aide enabled me to work closely with the students and be a participant observer. There were four Grade One classes, and I spent my time between these classes offering to assist in print based learning. There were computers in all the classrooms; however, these were used mostly for extension work

as 'edutainement' or 'play-way-to-learn' (See Underwood & Underwood, 1996, p. 2), when the teacher rewarded children who finished their tasks by allowing them to engage with digital stories or interactive texts (see also Lankshear et al., 1997). As noted by Underwood & Underwood (1996, p. 2-3; see also Underwood, 2000), there may be "limited educational gains with the use of interactive books, because much of the animation is not central to the story and it may therefore act as a distracter".

Following ethnographic traditions, my study was grounded in the realities of the classroom; as Burns (2000) notes, such research involves sociological study aimed at examining social and cultural practices. Thus, in a way, my research question emerged from the activities in the classroom and, as shaped by the data, was: how can teachers incorporate literacies other than print based literacy successfully in the primary classroom? An aligned question was: Is it suitable for Grade One students— who are still learning to read—to be taught the complex ICT technologies of PowerPoint and Paint software? In brief, could technologies be used beyond 'edutainement' purposes for primary classes?

In being a participant observer, I had established close contact with Julie (a class teacher), and with the students. Observations and informal conversations with Julie were conducted to note pedagogical practices. My focus being on literacy rather than use of computers in the classroom, I recorded reflections as notes on literacy. The reflections were to aid my thinking about the pedagogic implications of interweaving different modes of instruction and different forms of literacies with ICT knowledges.

While gaining knowledges of the multimodal multiliteracies is no easy task for students of any grade or level, it is perceived as particularly difficult for Grade One

students. In the present day context, however, students are expected to become proficient in using different technologies and develop critical thinking skills through appropriate selection and evaluation of texts that are both print based and electronic. The expectation, therefore, is that students from an early age will become familiar and adept at multiple forms of literacy: including electronic literacy. Electronic literacy, as Shetzer and Warschauer (2000, p. 172) identify, "assumes that there is not just one literacy, but many kinds of literacy, depending on context, purpose and medium". Moreover, the digital modes of learning involve both "playful interaction" (Merchant, 2005, p. 302) and learning as performance by doing and, thereby, become significant aspects of literacy activities.

The production of a digital story book became a challenging task for Year One students as they negotiated the complex assemblage of language, image, sound and technology. The multimodal tapestry meant that students had to make meaning of a complex range of modes as well as correlate these cohesively to form a major text. Narrating and writing a story became a novel attempt as resources of linguistic, visual, spatial designs were judiciously interwoven. The production of the digital storybook became not only an effort to re-write a well known story book, but was also a creative attempt to understand narrative genre and text complexity as well as how new texts are created.

Transiting from print to digital texts allowed the students and Julie to work with a range of sub-texts and themes. Moreover, in engaging with different designs and ICTs, the students actively indulged in intertextual reading and digitextual practices. As noted by Jewitt (2005, p. 329), Julie and the students discovered that, "multimodal

texts of the screen redefine the work of the reader who has to work to construct a narrative or assert her or his own meanings via their path through a text".

The digital storybook was worked on in the literacy block each day, when Julie did numerous other literacy activities, including morning talks, story book reading, guided reading, reading recovery, genre writing, interactive writing and computer aided activities on reading and pronunciation. Julie provided intensive scaffolding and overt instruction—suited to the age group—towards active reading and writing. Julie had over 15 years of experience teaching the primary grades. Although trained in the traditional mode of teaching students how to read and write, Julie was highly interested in using technology in her classroom. Interactive CD ROMs were often used to teach students sound symbols, and software such as *Inspiration* was productively used for mapping ideas to help students understand concepts. However, Julie wished to progress beyond the mere integration of technology as an aid, to implementing creative learning processes through ICTs. The aim was in keeping with the definition of literacy as provided in *Literate Futures* (Department of Education, Queensland, 2000):

> Literacy is the flexible and sustainable mastery of a repertoire of practices with the texts of traditional and new communications technologies via spoken language, print, and multimedia. (p. 3)

The short unit on producing a digital story book was conceived as a multimodal project. Julie had read the narrative by Tolstoy (1968) titled: *The Great Big Enormous Turnip*, and had proceeded to critical analysis of the theme of the story. Questions posed to the students included: Who else could the old man have called to pull out the turnip? Who do you think would have been suitable to help pull out the turnip?

If you had to pull out the turnip, who would you have called for help? Why? Through critical questions, Julie enabled the students to think beyond the scope of the story and to draw from their known knowledge base, in short, their stories. The students entered into a discussion of the story they had just read as needing a re-write and concluded that the ending could be improved upon. The class discussed various ways to improve the text and expressed an interest in not only re-writing the narrative but also re-visualising suitable images to produce an effective story book. The resultant activity was a digital story book titled, *A Great Big Enormous Carrot*[ii] that was situated in the literacy practices of the learners.

There were two discourses at work in this literacy activity: one was the childhood discourse of imaginative fantasy and the other was teacher generated curricular discourse of discussing and using the narrative text type. Fantasy allowed students the authorial freedom to manipulate themes from their social, cultural and gendered contexts as well as explore and enter the text as multiple authors to control the narrative conventions (see Mikkelsen, 2005).

The material chosen was decided upon with the students drawing on their prior knowledge of narratives and popular tales to situate learning. The class consisted of a majority of mainstream Australian children and some students from countries such as Bangladesh, Sri Lanka, India and Hong Kong. While the students came from different cultural backgrounds, Julie ensured that all students had knowledge of western fairy tales through an extended discussion of fairy tale stories and characters. The group also had to understand the use of drawing software and make decisions about visual representations. Instead of scanning images from books on fairy tales,

the students chose to engage with Paint software in groups to create their own images. Students thus made decisions about design layout of various slides, as well as details of colour, shape, size, background and image positioning.

Julie had to plan ahead on the choice of linguistic designs to be incorporated into the PowerPoint. As Lankshear, Synder and Green (2000, p. 2) argue, if teachers are to acknowledge the challenge of teaching with new technologies, they must draw upon "informed personal understanding". Julie began by storyboarding the narrative on the whiteboard with the entire class reading sections of the narrative and offering creative story lines. Thus, the characters of the original story were substituted with various fairy tale characters through negotiated discussion. The students had opportunities to share their personal readings of fairy tales and briefly narrate the ones they were familiar with, while Julie extended their knowledge by making the students think about the narrative they were to write.

In all this, critical framing was a central concept. Different fairy tales were compared and contrasted. Fairy tale characters were closely examined for their suitability to the 'task'. The characters were chosen after much discussion and the students were allowed to make free choices. The story was modified and simplified to suit the literacy levels of Grade One students. Julie employed the pedagogy of multiliteracies through situated practice, overt instruction and critical framing to produce transformed practice (The New London Group, 2000) which was in the form of a digitised storybook that was critically reviewed before being read in pairs to an audience of parents and other adults.

The experience in producing their own storybook based on a well known narrative was at once a scaffolded practice in the narrative genre and an experiment in producing a coherent text. For many of the students observed, it was an entirely new experience in moving through different knowledge processes towards a creative and critical application of their literacies.

Throughout the literacy activity, Julie immersed the students in their experience of narratives and life worlds. Presenting the narrative of *The Great Big Enormous Turnip*, Julie identified the conventions of narrative such as beginning, middle and end, orientation, complication and re-orientation. Conventions of linguistic design were discussed in terms of vocabulary, sentence structure, thematic and structural cohesion. Visual design elements discussed were appropriate background colour of slides, slide layout, colour contrasts, skin colour for the representation of various characters, font size and paralinguistic cues for emphasis. Audio design was closely examined along with gestural design, to train students to deliver the text with suitable effect to their audience. The students read the story aloud in pairs, which called for practice reading—requiring, in brief, aspects of audio design, for example, tone, emphasis and stress. As a result, the brief exercise helped students articulate the new from the known, to conceptualise the thematic content of the narrative, and then to critique their own work and be innovative with the main story line.

In summary, students productively accomplished the four knowledge processes of experiencing the known by bringing in their knowledge of western fairy tales, while experiencing the new through Julie introducing them to the idea of a digital storybook and technology. In conceptualising knowledge they engaged with naming

and theorising. Thus, students tried to discuss how the concept of a narrative was important to the digital story. Julie drew a concept map of a narrative and discussed specific aspects of narrative continuity. The narrative was examined for beginning, middle and end, and overall story progression. Finally, the students discussed the ending of the story and the manner in which they wanted to extend the story. The students analysed the characters of fairy tales to choose the most suitable ones for their story. Thus, certain characters were chosen over others, for instance, Cinderella, the big bad wolf; the woodcutter from Red Riding Hood and certain characters were left out, like Cinderella's wicked sisters. The application process involved students modifying and rewriting the story and using Paint software to create their own versions of the fairy tale characters. Thus, knowledge processes were productively drawn for each stage of the literacy activity with students being creative and critical innovators of texts.

Further, metalanguage was productively employed to create meaning in the texts and to produce an overall cohesive text. Thus, the process of writing a digital story involved, as Kalantzis and Cope (2000a, p. 246) observe, developing a language to describe the processes of how meaning is made. This was achieved by Julie drawing on the resources of text available in the storybook and by drawing on PowerPoint and Paint software tools. In discussing the ICT tools, Julie used exemplars as well as employing expert students from the senior primary to assist her students. The tools of PowerPoint such as slide transition, formatting, layout, text boxes and saving the document were discussed. Paint software was examined to illustrate how it could be used for creating effective slide backgrounds and to design the characters. There was explicit overt instruction in PowerPoint and Paint software through exemplars and

teacher modelling. The result was higher order thinking, with students demonstrating deep understanding in their choice of slide transitions, colour schemes of slides, image size and animation.

In brief, Julie ensured that students could create their own digital story book by scaffolding student knowledge through explicit overt instruction and by providing exemplars of different designs, particularly the linguistic and visual design.

The story was published as a PowerPoint presentation and read aloud to adults and peers. The presentation helped the students to engage effectively with their activity and be reflective, in short to employ transformed practice.

**Discussion**

Overall, the literacy activity integrated the 'old' or traditional modes of reading and writing with new modes of reading and writing and 'new' modes of technology. For the Grade One students, a focus on different designs facilitated the development of reading and writing skills, along with multimodal literacies and ICTs. The exercise demonstrated students' learning and involvement with different design repertoires. For example, visual design was learnt through use of colour, font and layout; audio design consisted of the students learning appropriate tone, pitch, pause, and clarity of expression; while linguistic design required attention to appropriate vocabulary, local and global coherence, cohesion and aspects of narrative text type. Students simultaneously engaged in the language of technology and the metalanguage of different designs. The elements of productive pedagogy (Department of Education, Queensland, n.d) such as collaborative group learning and connectedness to the world outside the classroom were established through co-construction of the story

by the whole class and by sharing knowledge of designs. There was inclusiveness in the groupings with Julie carefully choosing students from diverse backgrounds to work together.

Besides, active learning was displayed as students learnt to co-create text by building on the knowledges each of them brought to the activity. For Julie, technology was a means to an end with a PowerPoint presentation as the text output. In this, Julie moved away from a linear, procedural reading and writing approach, to a process and problem based approach where the students and teacher facilitated the successful creation of a digital story book. After producing the digitised story, Julie and the students evaluated their work on the design repertoires, and reflected on what could be improved.

Students demonstrated a deep understanding of texts by engaging with print, visual, spatial and audio designs and technology. As Kress (2000a, p. 340) states, designs accomplish "the intentional deployment of resources in specific configurations to implement the purposes of the designers". A study by Mehan (1989) in the use of technology in the classroom has illustrated that often computers are embellishments in the classroom to consolidate print literacy practices. However, as Warschauer and Meskill (2000) suggest, teachers who employ socio-constructivist methods of teaching are involved in a pedagogical shift, altering their beliefs about teaching with new technologies based on the understanding that it creates different social contexts and different literate practices (see also Lankshear & Knobel, 2003; Luke, 2003).

In this study, learning processes engaged with multimodal literacies and thereby attended to the diversity of the learners. That is, as Gee (1996) indicated, adopting a sociocultural perspective, literacies were being performed through the social situatedness of the learners and through meaningful activities. It could be argued that dominant ideologies were being reinforced through the text materials chosen for the digital story, and a wider, more diverse range of folk stories could be drawn upon for the construction of a digital story book. However, Julie ensured that the materials were commonly known to all students and that they were familiar with the fairy tales as common shared knowledges. It must be acknowledged though, that such exercises brought the context decisively into focus and clearly revealed to Julie and the researcher the complex choices we have to make in transiting from monocultural to multicultural societies. Consequently, multiplicity was reflected in the choice of materials, in the mediation that occurred between the small groups organised for various tasks, and between students and teacher engaged in the co-creation of the text.

In conclusion, in rewriting the popular story students were engaging in important shifts in identity from students to authors by discursive reframing of popular tales and characters. As Merchant (2005, p. 304) observes, small classroom based acts of authorship are important in re-situating the identities of learners, "as learners position themselves in the multiple social practices and discourses that surround them", particularly as digital literacy offers a site for identity and agency to be interrelated. The students established new learner identities through learning by doing, by active reading and writing, and by collaborative group work, while Julie shifted from a transmissive mode of teaching to teaching by modelling and

scaffolding. More significantly, however, Julie became a facilitator and often co-learner in the entire pedagogical activity of engaging with the knowledge processes and designs.

Thus, both students and the teacher were rewriting their identities, shifting from learner to facilitator through interactive sharing of ideas and skills. For Julie and students there was a shift from a linearity of learning to hybridized means of teaching and learning. It was a reflexive exercise with "alternative starting points for learning", "alternative forms of engagement" (Kalantzis (2006, p. 12). The literacy activity demonstrated that reflexive exercises in classroom practices can occur if it is acknowledged that, "in so far as the role of education is transformation, it is by way of extension of one's repertoire, boundary crossing and expanding horizons, rather than having to leave old selves behind" (Kalantzis & Cope, 2000b, p. 148).

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[i] Pseudonym

[ii] I reproduce the story titled *The Great Big Enormous Carrot* here:

> Once upon a time Pinocchio planted a carrot seed. "Grow little carrot seed. Grow sweet. Grow strong," he said.
>
> The carrot grew big and sweet and strong. "I'm going to pull up this great big enormous carrot," he said. BUT he could not pull it up.
>
> > Pinocchio called Rapunzel to help.
> >
> > Rapunzel called the Three Little Pigs to help.
> >
> > The Three Little Pigs called the Big Bad Wolf to help.
> >
> > The Big Bad Wolf called Cinderella to help.
> >
> > Cinderella called The Ugly Duckling to help.
> >
> > The Ugly Duckling called Sleeping Beauty to help.
> >
> > Sleeping Beauty called Jack and the Beanstalk to help.
> >
> > Jack and the Beanstalk called the Woodcutter to help.
> >
> > They pulled and **Pulled and Pulled**.
> >
> > Up came the carrot at last!
>
> They took the carrot home and made a great big carrot cake for dessert.