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TEACHERS AS RESEARCHERS USING THE FOUR RESOURCES MODEL AS A MAP OF PRACTICES

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INTRODUCTION

> One of the strengths of the "four resources model" is that it attempts to recognise and incorporate many of the current and well-developed techniques for training students in becoming literate. It shifts the focus from trying to find the right method to whether the range of practices emphasised in one's reading program are indeed covering and integrating a broad repertoire of textual practices that are required in new economies and cultures. The model, then, is a map of possible practices (Luke and Freebody, 1999)

This statement provided the impetus for the research that this paper describes. In undertaking this research I wanted to investigate how teachers could use the four resources model as a 'map of possible practices'. I also wanted to explore the possibilities of constructing research as a collaborative project between academics and teachers. I thought the four resources model would provide a framework for research where teachers are seen as agentic and active participants in the project rather than passive subjects to be studied by a researcher.

This paper then is located within the intersections of two different discursive systems about teachers and teaching. The first of these systems is that concerned with the teaching of literacy. The four resources model, as explicated by Freebody and Luke (see for eg Freebody, 1990; Luke and Freebody, 1997; Luke and Freebody, 1999; Freebody and Luke, 2003), provides teachers with a framework to investigate their current literacy teaching practices while also providing an overview of the particular resources that "participants in literacy events are able to use" (Freebody and Luke, 2003, p. 56). These four resources are breaking the code of texts, participating in the meaning of texts, using texts functionally, and critically analysing and transforming texts. Teachers who use the four resources model are not required to follow some new prescribed approach to the teaching of literacy. Rather, they are able to use the model to examine their current practices to find out if they are helping students to use all four repertoires of practices or if they are focusing only on one or two. The research project described in this paper involved four teachers undertaking this investigation of their own practices, mapping the existing practices onto the four resources model, and trialling strategies and teaching practices that would 'fill the gaps'.

The second discursive system within which this paper is located is that concerned with professional development of teachers. Within this context, I am interested in the possibilities of engaging teachers as researchers who actively and agentically participate in projects that will lead to effective and meaningful changes in their practices. By positioning teachers as researchers I recognise the complexity of teachers' work and the theoretical underpinnings that inform their practices, while also recognising that 'teachers as researchers' has become one of many slogans infiltrating contemporary educational discourses. As Zeichner signals:

> In the last decade, the slogans of 'reflective teaching', 'action research', 'research-based' and 'inquiry-oriented' teacher education have been embraced by both teacher educators and educational researchers throughout the world (Zeichner, 1994, p. 9).

My use of these slogans then is somewhat paradoxical. I signal my knowledge of the slogans through the use of one of them in the title of this paper, while at the same time I want to disrupt the

emptiness of the slogan – to point out the richly complex work that teachers do when they act as researchers into their own practice. In this paper then, I describe my own understanding of teachers as researchers and how this understanding informed the design and outcomes of the research project.

TEACHERS AS RESEARCHERS

The embrace of slogans in the 1980s and 1990s that Zeichner refers to has become a tight bearhug in the 21st Century. These terms have become commonplace not only in education faculties across Australia and other parts of the world, but within education systems and schools. The slogans have infiltrated political discourses, so that state education ministers can talk about 'teachers as reflective practitioners', and have become part of new managerialist discourses so that school principals and administrators can talk about the 'performative outcomes of using action research in professional development'. Critics such as Zeichner (eg 1993) point to the haphazard way that such terms have been taken up by disparate groups. Ivor Goodson points to the "number of problems" (1995, p. 55) that arise when the 'teacher as researcher' slogan is used to focus research on teacher narratives and classroom experiences. While Butt et al (1992, p. 53) call for "research approaches that allow the teacher's knowledge of classroom realities to emerge", they also warn of the dangers of attempting to find generalisable and prescriptive solutions in educational research.

Within this context then, it is important to foreground the complex nature of teachers' work and the rich mix of theoretical underpinnings that informs teachers' work. I resist what Erica McWilliam (1994, p. 51) has called the "folkloric assumption" that teachers differentiate between theory and practice. Teachers' classroom practices are always informed by their theoretical understandings of the nature of teaching and learning. In this research project, I wanted to give teachers the time and space to talk and write about the choices they make about their practices, and how these choices are informed theoretically. One of the teachers in the project, Lavinia, talked about her understanding of the relationship between theory and practice:

> *Lavinia: but if you can justify why you are doing that practice then you have theory because you're using theory to justify your practice- so you know the theory that you might have at college you might never use because a- the school you've gone to doesn't use it or whatever, but what you do is you have another theory base to justify why you are doing what you're doing, because you don't just say, I believe in mixed abilities, unless you actually know about mixed abilities, about how children learn, and then it all goes back to all those theories that you kind of know, you've got together and said well that's why I teach in this way. Because even though you might think that they're separate you do marry them really easily*

These theoretical understandings that underpin and inform teachers' practices are drawn from diverse resources, including preservice courses, professional development programs, other teachers and teaching mentors, and teaching resource texts. In my doctoral thesis (Honan, 2001) I named as *bricolage*, the work that teachers do to create meaningful assemblages of practices from these diverse sources (see also Hatton, 1989 for her description of teachers as bricoleurs). As *bricoleurs*, teachers make carefully considered and theoretically based decisions about their classroom practices.

Colin Lankshear and Michele Knobel (2004/forthcoming) have described one of the key points that distinguishes teacher research from that led by academics as "that teacher research must flow from the *authentic* or felt questions, issues and concerns of *teachers themselves*". Most importantly they see this point as being compatible with guidance and formal suggestions offered by academics. It is how the relationships are formed and conducted between members of the research team that identifies the work as teacher research. The following description of the research project outlines how it arose from concerns of the teachers themselves, and how the guidance I offered was adapted

by the teachers. The relationship between myself and the teachers is explored in the last section of this paper.

THE PROJECT

In August, 2002, staff at a small Catholic school in Melbourne invited me to work with them to find ways in which they could improve their literacy teaching. The four women teaching Grades 3 – 6 met with me and their deputy principal to discuss the development of a school based project for 2003 that would focus the school's attention on literacy teaching and learning. I suggested that a pilot research project could be undertaken in Term 4, 2002, and that this project would assist them in developing their skills as researchers, while also giving them a direction to follow in their school based project the following year.

The four teachers were a diverse group of women, in age, experience, and teaching approaches. They were similar though in their common enthusiasm for the project, and in their willingness to explore ways to change and improve their teaching practices. Comments such as this one from one of the teachers, Tara, exemplify their common understanding of the need for change:

> *Tara: and I think that teaching methods change and everything because we're always in this profession we're always striving for what we think can be better, we're always looking for if there's a different way to do it, so I don't think we'll ever get to this idea here – we want to get to it but I think we won't because we're always changing, we're always looking for better newer things so we have that ideal because we want the best for the kids we are teaching we want them to achieve the best so we've got an ideal here but in reality that ideal's always going to be there because new things come in and we try them out and then we're looking for something else and so it just continues like that*

The research was organised around the release of the teachers from their classrooms. The schedule is reproduced here:

Week	**Time**	**Activity**	**People**
Wk 1	3.30pm - 5pm	Meet with Gds 3 – 6 staff to provide general overview of project	Gd 3 – 6 teachers Deputy principal
Wk 2	9am – 12 pm	Setting tasks for data collection	Gd 3- 6 teachers
Wk 3	9am – 3.30pm	Research day introducing Freebody and Luke's four resources model and its relationship to school's literacy project	Gd 3 – 6 teachers
Wk 4 and 5		Teachers trial ideas for activities and strategies in their classrooms.	
Wk 5		Teachers could be released from class during this day to work with literacy coordinator on issues or problems or questions related to trial	
Wk 6	9am – 3.30pm	Reflections and responses to activities and strategies trialled	Gd 3 – 6 teachers
Wk 7	9am – 3.30pm	What we have done – summing up outcomes of research project – discussion of strengths and weaknesses of research model	Gd 3 – 6 teachers
Wk 8	9am – 3.30pm	Directions for 2003. Development of literacy project's directions for next year	Gd 3 – 6 teachers

During the times that we met as a group I asked the teachers to spend time writing about their responses to issues raised. I also tape recorded part of the discussions and their reflections on the process at the end of the eight weeks.

Why do we do the things we do?

We began the project with a discussion that centred on the question, 'why do we do the things we do?' I asked the teachers to brainstorm the factors that had influenced their teaching practices and then to write about their responses to this question. In their reflections at the end of the project, the teachers all commented on the importance of this question in focusing their attention on their practices. One of the teachers, Jenna, wrote:

> *Jenna: I know that this has also impacted on the types of strategies that I choose. I find myself thinking about not only strategies I will use but why I'm using them.*

Isobel also commented on the importance of asking, 'why do I do the things I do?'. To her asking the question started her thinking about her practices:

> *It brought these things to the forefront and you actually had to think about why I'm doing an activity. ...Even though that was really difficult because you said to us don't just put down guided reading, put down exactly what you're doing in guided reading and it was a real struggle for me because I'm always working with the kids in the class to actually stop and run over and try to write something down but also looking back at it, I had this list and I thought I've put down guided reading, I've put down this and this, why did I do that? Why did I do those activities with that group of kids?*

I asked the teachers to collect data on their current teaching practices. The teachers decided how and what they were going to collect. For example, as Isobel says in the quote above, she collected this information while she was teaching. Others used their planning documents, student worksheets and/or information they had collected for ongoing assessment of student work. My only guidance here was to insist that they provided detailed information about their teaching practices in the data they collected. One result of this insistence was the teachers began to see that they focused heavily, especially in their planning documents, on what the children were doing at particular times in the classroom, and sometimes omitted to include what the teacher was doing.

The four resources model

After the teachers had collected this data, I introduced the four resources framework. I gave the teachers two papers to read where Allan Luke and Peter Freebody explained the four resources model (Freebody, 1990; Luke and Freebody, 1999). I also provided a framework of the four resources adapted from various sources (reproduced below).

Breaking the code of texts *The emphasis here is on decoding and encoding texts.* **Some examples include:**	**Participate in the meanings of texts** *The emphasis here is on making meaning from the text* **Some examples include:**
Alphabetic awareness Recognising letter sound relationships Phonemic awareness Word building/manipulating units of sound Spelling Recognising conventions or mechanics of texts Recognising conventional sentence structure	Active participation to gain meaning from texts and illustrations Drawing on own experiences and prior knowledge Comparing own experiences with those of the text Comparing experiences with similar texts Understanding how a text works

Use texts functionally *The emphasis here is on understanding the purpose of different texts* **Some examples include:** Using texts in different ways both in and outside school Knowing what is expected at school Reading, writing, speaking and listening for real purposes Using a variety of texts appropriately	**Critically analyse and transform texts** *The emphasis here is on understanding how texts are constructed within social conte*xts **Some examples include:** Recognising that texts are not neutral but represent particular views, voices and interests and silence others Understanding how texts are crafted to the interests and ideologies of the writer Understanding that texts influence people's ideas Questioning/challenging texts and understanding that their designs and discourses can be critiqued and redesigned in novel ways

Figure 1: The four resources of an effective literacy user (adapted from Consultancy and Development Unit, Deakin University, 2001, p 65)

The teachers drew on their readings of the two papers, the framework, and on my explanations of the four resources to develop a set of shared understandings about the model. We discussed examples of activities that would assist students to develop one or other of the resources and we talked about kinds of balanced literacy programs that could be the result of using the model. One of the most important of the shared understandings of the four resources model was drawn from quotes such as this from Freebody and Luke:

> The force of the four roles model for some literacy educators has been simultaneously to reaffirm and adequately locate some of the practices they have been using, and to challenge them to develop others. Unlike some other perspectives, this model does not scorch the earth, dismiss prior theory and practice, and rebuild anew (2003, p. 61).

Lavinia's written reflections on the four resources model is an example of the importance that the teachers placed on this respect for their current teaching practices.

> *why I like these people's model is it isn't about throwing out the old and pushing the new, it is about reorganising and changing strategies, thinking and knowing what you the teacher are on about at any particular teaching/learning time.*

The emphasis that teachers place on this reaffirmation of their current practices points to one of the great strengths of the four resources model. What Freebody and Luke refer to as 'scorching the earth' seems to be an insidious symptom of many professional development packages and programs directed at teachers, and indeed of many systemic policies and curriculum documents. Of equal importance to the reaffirmation of current practices are the opportunities available to reframe and adapt these and to create new approaches to literacy teaching. I have referred earlier to the teachers' common understanding of the constant need for changes and renewal of their practices. The four resources model depends on this understanding of the need for change, while at the same time avoiding the denigration of existing practices that has been the feature of work with teachers for far too long.

Mapping existing practices

The next stage of the research process was to map the strategies that the teachers currently used, collected in the data collection phase, onto the four resources framework. The teachers and I worked together to decide which of the four resources was being encouraged by each particular teaching strategy they described as being used in their classrooms. The results of this mapping exercise are reproduced below:

Breaking the code of texts	**Participate in the meanings of texts**
Shared reading Circle reading Choral reading Guided reading Reading with teacher Alphabet Identifying words in text Identifying text types Modelled writing Shared writing Interactive writing Writing process Parts of speech Spelling Punctuation] Handwriting Publishing on computer	Serial reading Reciprocal teaching Language experience – writing and reading] Reading conferences Reading to Listening post Sequencing Read and retell Comparison of texts with other personal experiences Literal comprehension Guided writing Write attack Conferencing
Use texts functionally	**Critically analyse and transform texts**
Reading websites Readers Theatre Silent reading Identifying structures of text types Writers' notebooks Writing using structures and audience and purpose Making choices Writing for real audience with a clear voice	Novel studies Interpreting texts

Figure 2: Mapping existing strategies on the four resources framework

Presenting the results of this mapping exercise in a table such as this reduces the exercise to a simple, one-dimensional list, or series of lists. What is not visible here is the discussions that surrounded the inclusion and exclusion of each item on the map. I think the teachers and I all refined and remade our understandings of each of the four literacy resources during this mapping exercise as we argued, wrangled, and collaborated on the construction of the map.

There are some important points that can be made about the teachers' practices from the construction of this map, and the discussion that surrounded the construction. First, the emphasis on code breaking in their current teaching was quickly recognised by the teachers. They drew each other's attention to the growing list of practices under the *breaking the code* heading, while at the same time noting that they had not been previously aware of this emphasis. So the mapping exercise shed new light on the teachers' existing practices.

Second, the teachers were aware that the practices listed under the *participate in the meaning* heading grew out of work they had previously done using a language experience approach. Isobel in particular used this approach to literacy teaching because of her prior experiences working with children with English as a second language backgrounds. The language experience approach encourages teachers to plan shared activities such as excursions so that literacy teaching can build on the shared knowledge and experiences gained during such activities. So the mapping exercise assisted teachers to see how their theoretical beliefs about literacy informs their practices.

Third, the teachers saw that they were not encouraging students to *critically analyse and transform texts*. Making visible this gap helped teachers to think critically themselves about their own practices. Jenna engaged in this critical commentary on her own practice when she reflected on this mapping exercise:

> *I think when there was that huge gap in the critical analysis area I realised that we're selling the kids short. We're providing really well in the other three areas but this is the area that really is giving them the opportunity to make sense of what they're learning. And I thought that was the need, we don't want them to regurgitate things that we're giving them, we want them to make sense of what they're learning but to, for it to be meaningful to them, have to give them a vehicle for that, and hence the strategies that come into play.*

So the mapping exercise not only helped the teachers see their practices in new ways but also helped them to identify where they might strengthen their work. This then is much more than just a reaffirmation of teachers' work – the mapping exercise provided the teachers with the impetus needed to create and transform new practices.

Transforming practices

The next stage of the process was directed at the creation of new practices, as the teachers worked to discover ways to teach students how to critically analyse and transform texts. However, this search for new practices once again depended heavily on the teachers' existing professional knowledge. They dredged through their memories of university lectures, they trawled through resource books that filled their professional library shelves, they talked about and compared different ways they had done things in the past. These searches and discussions exemplified teachers as bricoleurs as they created anew meaningful practices from diverse sources. They talked and wrote about inspiration from university lecturers, teaching partners, visits to other schools, teacher resource bookshops, professional development programs, literacy educators and authors. The different approaches discussed and written about included; 'language and culture', 'language experience approach', 'theme-based programs', 'process writing approach', 'literacy block', and 'reciprocal teaching'. From these discussions and searches, the teachers devised practices that could be trialled within a two week period in their classrooms.

After the two weeks of trialling new strategies we met to discuss the problems and successes experienced in the classroom. We then began the task of creating a list of strategies that could be used to encourage students' development of all four of the literacy resources. This was a long and complex task that involved many drafts. The final result is reproduced below.

Breaking the code of texts *The emphasis here is on decoding and encoding texts.*	**Participate in the meanings of texts** *The emphasis here is on making meaning from the text*
• Predict key words in text based on title • Dicta gloss • Use word banks • Model how to identify headings, diagrams, indexes in texts • Show how to use semantic, syntactic and grapho-phonic cueing systems • Teach how dictionaries are constructed • Teach alphabetical ordering for dictionary use • Do word building activities (including base words) • Do word origin activities • Do word family/blends activities • Do word breaking activities • Play 'dictionary' game to learn how definitions are written • Provide material with new vocabulary • Teach what to do when encountering new vocabulary • Teach handwriting skills • Teach keyboarding skills • Teaching functions of a computer • Teaching how to use different software • Teach how to publish on a computer • Show how different language registers are used • Teachers and students together read aloud a variety of texts • Circle reading to identify paragraphs • Summarise main ideas of text • Allocating roles in reading aloud • Modelling the writing process • Modelling the technical features of writing (spelling, punctuation, paragraphing, editing, proofreading, grammar) • Writing interactively with small groups of children • Modelling the technical features of reading aloud through the use of a listening post • Write attack – brief on the spot writing about a specific topic	• Read aloud a variety of picture story books and explore how the story is represented using both words and images • Readers theatre • Use role play • Have a suggestion box • Stop, think, do • Share our own experiences as teachers and link them to topics, texts, stories etc • Provide children with opportunities to share their experiences and link with literacy experiences • Demonstrate how to note take/note make • Teach how to record information using various graphic organisers • 'Think, pair, share' • Vox – pop – an interview method used to elicit opinions and comments from the public about a particular issue. • Using literal, inferential, and evaluative comprehension questions • Ask for personal responses to texts • Reciprocal teaching • Provide children with shared experiences • Use open ended questions to explore the meaning of texts • Sequencing activities • Read and retell using own words

Use texts functionally *The emphasis here is on understanding the purpose of different texts*	**Critically analyse and transform texts** *The emphasis here is on understanding how texts are constructed within social contexts*
• Predicting based on title, illustrations, prior experience/knowledge • Confirming or modifying predictions after reading a short amount of text • 'Shared reading' and 'reading to' children and using listening posts, and silent reading to promote enjoyment of literature • Joint construction of different types of texts • Writers notebook • Provide opportunities for children to write different texts for different purposes • Spoken and written arguments to present own point of view • Practise following written instructions to achieve a goal • Produce text for a specific audience • Use a plot profile/story map to identify gaps in story – extend story by building contexts to fill the gap. Discuss why author did not include extra detail • Discuss the purpose of a genre • Model features of various genres (using posters, shared writing books, examples) • Guide the writing of various genres • Model use of KWL chart to list current knowledge, questions and learning. • Model drawing information from different mediums (posters, books, charts, internet) • Look at conclusions and develop alternative endings	• Teach brainstorming techniques: lists, bundling, concept mapping, mindmapping • Use 6 thinking hats to help children develop points of view about a topic • Involve children in reacting to different points of view in debates • Expose children to variety of text types and illustrations that highlight stereotypical roles (eg fairy tales, picture story books, magazines, posters, commercials) • Provide materials that allow children to create criteria for a particular purpose • Use PMI charts to allow children opportunity to judge ideas • Provide texts, pictures, multimedia that provide evidence of bias of images/words • Do a variety of activities that analyse the purposes and uses of colour in comic strips and multimedia • Use graphic organisers where chn identify their personal view/ character's view/ actor's view • Use open ended questions that allow critical analysis of texts • Do activities that direct them to 'what do you think'?, 'In my opinion', 'I feel'. • Draw pictures to match written descriptions • Establish a class publishing house – one group writes, another group illustrates, then analyse what is happening • Provide material that demonstrates that the illustrations influence understanding of the written text • Provide 'real life' texts that demonstrate a personal viewpoint • Teach how to debate • Provide texts where children can locate fact or opinions of others • Provide opportunities for children to talk about their different views on topics • Model how to listen and respond to other points of view: 'I hear what you are saying but'; 'I agree with your opinions however'

Figure 3: The four resources map of practices

THE VALUE OF THE MODEL

This map is valuable for a number of reasons. First, in their reflections on the project, the teachers commented on the value of the map as a resource for themselves and for the school as a whole. Second, the map provides some practical advice on how to implement the four resources framework in classrooms, advice that is currently difficult to find in teacher resources. Third, the process of constructing the map contributed to the teachers and my understandings, not only of the four resources literacy model, but of the meanings of such commonly used terms as 'strategies' and 'practices', of the links between teaching practices and educational theories, and of the importance of having clearly defined purposes and intentions for any strategies or practices used in classrooms. The publication of the final outcome of the project in this neatly constructed map of practices, as with the table described earlier that maps existing practices, hides and disguises the complex work engaged in during the process.

The resource model as a mapping tool.

Using the four resources model allowed me to emphasise the worth and value of teachers' existing teaching practices, and helped me to encourage teachers to see their work as bricolage. The teachers all commented on the success of the model, in terms of its use as a mapping tool, and as a resource to be used by them and other teachers at the school. For example, Jenna said:

> *This model, it's made me think more about what I'm doing, why I'm doing it and how important it is that we do actually make sure that we cover all four areas but sort of equally. So it's not that we're doing totally different things, what we're doing is fine. But we need to do more of some things or adapt some of the things, modify them perhaps.*

As I described earlier, the valuing of teachers' existing practices was especially important to them. Tara also commented on this:

> *So we've had old practices and new practices and we've seen we didn't have to discard all of our old practices, they were quite valuable practices, and seen where they fit in. And then we've been able to put in new practices and we've got ideas about new practices we can put in….By the end of it we've got a good resource with a list of different things that we can do that we can see a fairly balanced literacy program.*

In new managerialist discourses that have infiltrated schools, education systems and education faculties, teachers are constructed as bureaucrats, as "capitalism's 'soft cops'" (Lather, 1994, p. 245). In these discourses the teacher is seen to be a technician, "a routinized and trivialized deliverer of a predesigned package" (Goodson, 1997, p. 137; see also Apple and Jungck, 1990, and Robertson, 1996). The ideal automated technician of the new managerialist discourses is atheoretical, is profoundly interested in the ways in which practice can transform lives, work and society, and is not so interested in the reflexivity that is needed if one is to question the transforming work being done.

The comments that the teachers have made in working with me, and their thoughtful and theoretically based considered deliberations about their teaching practices contradict this construction of them as technical atheoretical bureaucrats. I believe that the use of the four resources model as a mapping tool assisted teachers in their thinking about the theories that inform their practices, which in turn helped them consider the transforming work that needed to take place. The four resources model, used as a mapping tool, actively contributed to the reconstruction of "teaching as intellectual work" (Smyth, 2001, p. 197).

ISSUES

Two issues were raised in the teachers' reflections on their participation in the project that need to be addressed here. The first relates to the difference between the research project engaging them as

collegial investigators of their own practices, and the usual models of professional development they had previously encountered. The second issue related to the different ways that time impacted on the project.

Research or professional development

The model of research that I used in this project is far removed from models of professional development usually offered to teachers. I believe that this kind of research project offers teachers more complex and deeply theoretical ways to think about their teaching practices than those offered in professional development opportunities. As I explained at the beginning of this paper, one of the outcomes I desired for this project was to encourage teachers to see themselves as co-researchers investigating ways to improve their teaching practices. I referred earlier to Lankshear and Knobel's comments on the relationships constructed between teachers and academics as being one of the keys to the development of teacher research. I believe that one of the impediments to this construction of a collegial relationship between teachers and academics is the history of professional development and research as sites for any engagement between these two groups of educators. To try to get a sense of the teachers' understanding of their own engagement in the research project, during the reflection interviews I asked the question, 'did you see this process as research or professional development?' Their answers point to the complexity of trying to tease apart these two different relationships between academics and teachers.

Lavinia: I see the research has helped the professional development but I see it as research because you basically asked us to collect data, to analyse data, to talk about data, and then come up with recommendations for the next time… I think the research side of it was important.

It would seem that here Lavinia understands herself as a co-researcher because of her understanding of the nature of the research process. Collection of the data and analysis of the data were undertaken by her so she knows that she was a researcher.

Isobel: I don't know how you separate the research and the pd, because it was pd, it was professional development but we also based it on somebody's research. I think it was myself as a teacher receiving pd based on the research and a little bit of the research process.

Here Isobel is drawing on her past experiences of professional development programs that are informed by research. The research done by somebody else (i.e. Freebody and Luke) was more important to her than any process she engaged in.

Jenna: I suppose I didn't look at it as research. I came on board looking at it as professional development because I know when I signed up it was, for me, well I'm coming here, I'm hoping to learn about something new hopefully or take away with me strategies or even look at things in a way that I hadn't looked at before. I didn't see it as research. I mean with research I thought it was more your angle, it was something we were helping you with but I saw it as two focus where I saw it as well, we'll help you with your research and you're helping us to highlight the different strategies we could use in the classroom. For me that was going to be the purposeful thing.

Jenna describes what I would call 'research as usual', where an academic invades a school for her own purposes, and attempts to 'give something back' to the teachers as a gift for being involved. While this would seem to be a cooperative exercise, it highlights the unequal relationships between academics and teachers during these types of research projects.

Tara: I think it's a bit of both but I think the difference is, in PD you get given a whole lot of in a day or something you get given a whole lot of information

and it's all theoretical. And the difference is we've been given a lot of theoretical information as well but we've been able to use all our practical experience and we've had time.

To Tara the difference between this project and her previous experiences lay more in the time and content than in the process. Like Jenna's comments, Tara also points here to the unequal relationship established between academics and teachers, where the teachers are receivers of packages of information.

Comment such as these have led me to ask questions of myself as an academic and a researcher, and of the research process I designed. Some of these questions include: was I engaging in 'research as usual' under the guise of engaging teachers in co-researcher practices? What kinds of discourses were operating in our discussions and how did these discourses work to position the teachers as both co-researchers and teachers receiving professional development? How am I implicated in the construction of these positionings?

These questions provide a far different reading of the teachers' comments than a reading that would increase the barriers between academics and teachers. My interest in working with teachers as co-researchers comes from my understanding of them as professionals who have rigorous and deeply theoretical understandings of their own practices. The comments by the teachers that I have included in this paper are evidence of their understandings of how theories inform practices, and of their considered and thoughtful approach to the assemblages of practices that I call 'bricolage'.

Time

There have been repeated calls for teachers to be given time to reflect on their own practices, to be engaged in teacher as researcher processes, and to adequately consider new theoretical approaches to teaching and learning. In this case, temporal issues impacted on a number of aspects of the project. First, there was limited time set aside for an exploration of the four resources model. In some cases this time proved to be insufficient. For example, the resources needed for students to become text analysts were sometimes described by teachers as those akin to critical thinking skills such as those encouraged through the use of such strategies as De Bono's Six Thinking Hats (De Bono, 1992). This misunderstanding is due to a lack of time spent on giving examples of text analyst work, and a lack of foregrounding the dependence of the text analyst role on the critical literacy practices associated with a socio-cultural approach to teaching and learning literacy (see for eg, Muspratt, Luke and Freebody, 1997; Knobel and Healy, 1998).

Secondly, stronger results from the trialling stage of the project would have been obtained if this period had been longer. The teachers had time to only implement part of what they had learned, and implement even this part in a minor way. So the changes to their actual teaching practices were minor. This contrasted with what I perceived as quite major changes in their thinking about the purposes for their choices about the practices. A longer period of time devoted to trialling, interspersed with time for collegial discussions, feedback and reflections would improve the research process.

Third, the whole project was completed within an eight week period in fourth term of the school year. While the teachers found the tight program to be beneficial in some ways, especially in the continuation of the program from week to week, the limited period also detracted from their capacities to reflect on their learning, the process, and the impact on their teaching. Most of the teachers commented on the difference between spending eight weeks on this process, and their usual forms of professional development (what I would call the 'hit and run' variety). But the limited time may also have contributed to the difficulties associated with distinguishing between this research process and professional development. Generally, and I believe that the teachers would agree with

me here, a longer project would allow us to work on the critically reflective processes that are recommended by John Smyth (2001). It would also allow the development of a project that could pay attention to the development of the research skills that are needed for teacher research as exemplified by Lankshear and Knobel.

CONCLUSION

This research project has contributed to new understandings of teachers' work in a number of ways. First, in relation to the work involved in teaching literacy, the research showed how the four resources literacy model can be used as a planning and mapping tool. This use of the model created new insights and understandings into teachers' literacy practices, as well as the rearticulation and reharnessing of their pre-existent skills and knowledges. This project therefore contributes to a growing understanding of the practical implications of the four resources literacy model.

One of these practical implications of the literacy model is the map of practices developed by the teachers as part of the project. This map of practices is not only of value to those teachers and their school, but also provides a valuable example to other teachers of the types of practices that can encourage each of the four resources.

The four resources literacy model was not only useful though as a mapping and planning tool or as a map of practices. The four resources model also encouraged teachers to theoretically engage with and reflect on what they are currently doing in order to transform literacy teaching and learning. Opening up opportunities for teachers to do this theoretical work contributes to a greater understanding of the complex relationship between theories and practice. It also therefore contributes to a deeper understanding of teachers as professionals who can be agentic and active participants in research that informs current and future educational practices.

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