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'Co-constructing' changes to classroom practice: Processes developed with early childhood teachers for students at educational risk.

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Chapter 4

Constructing practice: Interpretations of teachers' thoughts and actions

"The conversation of practice can be learned but not taught"
(Yinger, 1990, p. 92)

Introduction

In this chapter, Term One data are analysed and interpreted as a way of coming to know early childhood teachers' personal constructs of educational risk. This response to the first research question: *To what extent do teachers' personal constructs of language-based educational risk determine their pedagogy for students at risk?* shows how my learning was enhanced by interaction with teachers and students.

Analysis and interpretation of teacher data confirms the claim by Postman and Weingartner (1971), "The best anyone can ever do is say how something appears to him (sic)" (Pope & Keen, 1981, p. 30). Here, data from the first action research cycle describe how and why individual early childhood teachers respond to students' language-based educational risk as they do. Data from three teachers are selected to demonstrate similarities and differences between teachers' personal constructs of educational risk and to understand how teachers "construct practice."

To facilitate the iterative methodology used throughout this study, research question one was made more specific. Connections between teachers' personal constructs and classroom practice were considered through three subsidiary questions:

1. Which data do early childhood teachers use in their identification of language-based educational risk?
2. How do early childhood teachers describe and account for language-based educational risk?
3. How does teachers' confidence in their personal constructs of early childhood

language development influence their ability to identify children with language-based educational risk?

Next, subsidiary questions were rewritten as seven analytical statements to be accepted, refuted, or reviewed as directed by original data. So began the cyclic process of revisiting data until questions were answered in a trustworthy manner, I concluded that further data were required, or questions were no longer important. During the first school term of data collection, the seven analytical statements to be interrogated were as follows:

Analytical Statement 1 (AS1)

All early childhood teachers construe a personal theory of language-based educational risk.

Analytical Statement 2 (AS2)

Early childhood teachers identify language-based educational risk during routine classroom practice and in accordance with their personal constructs of language-based educational risk.

Analytical statement 3 (AS3)

Some early childhood teachers intentionally elicit data to identify and describe language-based educational risk in early childhood students.

Analytical statement 4 (AS4)

Few early childhood teachers include specific characteristics of oral and written language impairment in their descriptions and accounts of children with language-based educational risk.

Analytical statement 5 (AS5)

The provision of the OWLD assists early childhood teachers to understand and identify characteristics of language-based educational risk in their students.

Analytical statement 6 (AS6)

Early childhood teachers' confidence in their personal theories of child language development and language-based educational risk influences their ability to identify children "at risk" in their classrooms.

Analytical statement 7 (AS7)

Early childhood teachers' perceptions of themselves as having developed language expertise are predictive of their ability to identify language-based educational risk in their students.

As discussed in Chapter 3, analytical statements provide an organizational framework for interpreting teachers' personal constructs and their responses to educational risk. In this chapter, preliminary interpretations are presented as summaries of original data. I show how and why teacher data from the first action research cycle were selected to begin the structured narrative report. Teachers 1, 5 and 9 are introduced using the pseudonyms Jacqui, Penny and Toni respectively[1]. These three teachers feature in subsequent chapters to represent important variations in teacher thinking, pedagogy and co-constructed outcomes. In later chapters, data from action research cycles two through four are used to support, challenge or amend researcher interpretations given here.

Bassey (1999) encourages researchers to be creative with the iterative process, to ensure that associations between raw data and analytical statements are thorough and trustworthy. He recommends that researchers attempt to explain links between data and analytical statements by posing and testing hypothetical questions and considering cause and effect relationships. Here, teachers' interview data and participant observation records from Term One are systematically coded and cross-referenced as data items (DI) and analytical statements (AS). The analytical statements are detailed and numbered consecutively throughout the chapters to indicate whether or not prior analysis and /or explanation have occurred. Each analytical statement is "firmly based on raw data" for the purpose of providing "concise answers to the research questions" (Bassey, 1999, 70).

Teachers' personal constructs of language-based educational risk

Original data is used to show how action research includes the reporting and interpretation of participants' thoughts and actions. I consider cause and effect relationships between data and the analytical statements. Teachers' words tell stories of their thought-practice connections. In addition, interpretations of teachers' words are based on observations of teachers' classroom actions, teacher-researcher dialogue about shared classroom experiences, and in the context of personal construct and decision-making theory. The importance of both teacher data and teacher-researcher interpretations becomes clearer as the stories of Jacqui, Penny and Toni are told.

This way of reporting facilitates the detailed explanation of research outcomes for individuals, as well as, the exploring of outcomes common to two or more teacher participants. The stories of Jacqui, Penny and Toni are introduced here with a summary of each teacher's constructs of language-based educational risk, collated from participant observation and initial teacher interview data early in school Term One. Connections to raw data demonstrate the uniqueness of the co-construction story for each of these teachers. Later, each story continues with data from subsequent action research cycles, contributing to final interpretations and research generalizations.

Teacher Jacqui, acknowledged the reality of educational risk and referred regularly to social indicators of risk for her young early childhood students (CBRD22/2/00; CBRD28/2/00; CBRD20/3/00). She expressed concerns about the challenge of assessing kindergarten children accurately and identified her need to further develop expertise with language assessment and classroom language development practices. Jacqui confidently described language development strategies that she had used for students identified with educational risk in previous years. She welcomed co-constructive language planning opportunities and stated a strong preference for classroom-bases early childhood language support (TKJDI1-91).

Teacher Penny, (K1PD11-149) specified educational risk as language-based. She described her students' characteristics of risk in terms of their phonological awareness, speech-language usage, written language levels, fine / gross motor development and their self-esteem. Penny identified a need to further understand oral-written language interactions and reported a personal responsibility to identify and respond to language-based educational risk in her students. Penny was receptive to co-constructive language planning opportunities as an extension of the collaborative planning she and I shared in the previous school year. She explained her growth in confidence to identify and respond to students' educational needs as an outcome of the language expertise she developed in the previous year (CBRD24/2/00; 6/3/00; CBRD16/3/00).

Teacher Toni, acknowledged the reality of educational risk for early childhood students. She discussed reduced general learning ability and poor responses to

classroom tasks as characteristic of students at educational risk. Although Toni offered numerous examples of the ways in which she responded to students at educational risk, she simultaneously requested assessment information and asked frequent questions about educational risk (T2TDI1-108, DI122-145, DI163-193). Overall, Toni presented as a confident classroom teacher who did not directly discuss personal goals for professional development in meeting the needs of students at risk. Toni provided examples of colleagues to whom she referred for practical ideas for classroom language planning. In this way, Toni welcomed co-constructive language development opportunities with a number of her peers (CBRD8/2/00, CBRD18/2/00, CBRD28/2/00, CBRD20/3/00).

Differences among the personal constructs of language-based educational risk espoused by early childhood teachers were of interest throughout this study. Action research was an appropriate way to track changes in teachers' personal constructs and classroom practice and to report the outcomes and implications of co-construction. Here, teacher stories are told to report and interpret similarities and differences between teachers' thoughts and actions, as connected to co-construction processes.

By the end of school Term One, I had formed two preliminary interpretations of links between teachers' personal constructs of early childhood language development and their responses to students' language-based educational risk.

1. Teachers' previous experience of language-based educational risk predisposes them to acknowledge the reality of this "risk" in each class of students.
2. Teachers' personal theories of language-based educational risk shape their recognition or oversight of characteristics of risk in new students.

The possibility of relationships between teachers' confidence in their personal constructs of risk, their experiences of risk, and their responses to students at risk, was acknowledged before the end of school Term One. However, further data were required to investigate possible cause-effect relationships for individual teachers.

Reporting and interpreting personal constructs

Data relevant to Analytical Statement 1 (AS1), *All early childhood teachers construe a personal theory of language-based educational risk,* were interpreted against the conceptual background of available literature. Tripp (1993) discusses how "personal views and experiences influence our teaching" and asserts that the "professional judgements we make depend on the interaction of two aspects of being a teacher: who we are as private people, and who we are as trained and experienced teachers" (p.142). His words provide theoretical support for the first analytical statement; teachers' personal constructs of early childhood language development and language-based educational risk will be influenced by their "unique set of personal experiences, interests, values, circumstances", as well as, by the characteristics of "a common set of professional norms" (ibid).

Alternatively, the constructivist interpretive approach used here (and by Fehring, 1999) provides a way of knowing the extent to which teachers' personal constructs of early childhood language development determine their response to language-based educational risk. A constructivist interpretive process encourages discussion and analysis of personal constructs with teachers. Hence, analytical statements are matched to direct quotes from teacher participants. This is to respect the truth for each teacher who says, "how something appears" (Pope & Keen, 1981, p. 30). Later, direct quotes from teacher participants provide readers an opportunity to interpret data against their unique experiences, interests, values, circumstances and professional norms.

Differences among teachers' personal constructs of early childhood language development and language-based educational risk became apparent during classroom participant observation and initial teacher interviews. Kelly (in Bannister & Fransella, 1974) stressed that each individual "is in business to make sense out of his (sic) world and to test the sense he has made in terms of its predictive capacity" (p. 20). Teacher data illustrated how individual teachers tried to "make sense" of students' diverse responses to classroom learning opportunities. During initial interviews teachers were encouraged to share their understandings of educational risk and to describe students to whom this term might apply. Teachers were asked also to

share their personal constructs of what educational risk meant to them in their early childhood teaching roles and to relate experiences, interests, values, circumstances or professional practices that illustrated these constructs.

All of the early childhood teachers described their understanding of educational risk. During initial teacher interviews, they referred to professional or personal experiences, students they were currently teaching or had taught, and to their teacher training or related professional development to illustrate their personal theories and interests related to educational risk. During Term One teacher data generally confirmed available literature. Individuals developed constructs from an array of prior experiences and used these to respond to new classroom challenges. However, further organization and analysis of data from initial teacher interviews and classroom participant observations showed subtle but important differences in teachers' personal constructs of language components in educational risk. One difference was teachers' degree of specificity about language components in educational risk.

Language components in educational risk

Few teachers related their personal theories of educational risk specifically to oral and written language learning. Only Teacher 5, Penny, referred to educational risk being language-based as described in current literature (Bishop, 1997; Catts, 1994; Rinaldi, 2001). Other teachers, including Teacher 1, Jacqui, and Teacher 9, Toni; acknowledged that problems with language development can impact negatively on students' learning outcomes. However, Penny was more specific in her explanation of the links between language development and educational risk. She said:

> …from my brief experience last year, I find that language is the basis of everything. I mean you can't even do maths without reading your page…. So, educationally at risk? I would find children who are having problems with their language development (are) missing a step in their learning so that affects everything…. I know students last year (whose) whole problem… was their language development and it affected their behaviour in class and their work in every other subject area. (T1P5DI1-2).

Penny specified a need for students to have done more than just learn to talk in their early years. She continued, "if you aren't confident with your language then you will be at risk" (TIP5DI3). "It's not immaturity. We've got to stop saying that" (T1P5DI35). This construct, shared by Penny, was used later in the Language Development Project to facilitate professional dialogue about developmental immaturity versus language-based educational risk. (The same quote was used to open Chapter 1. My intention was to highlight the importance of teachers' understandings in shaping classroom practice.)

Later in this interview Penny described some of her current students to illustrate her distinction between speech and language components of educational risk. She described a child whom she considered had significant speech and language impairment:

> (He's) not just saying /f/ for /th/, (it's) his language… the way he forms his mouth with the letters. He's having more trouble trying to get his mouth around words than any of the children who have problems speaking….
> (He) would be my priority (T1P5DI14).

The same child was also described as, "great with routine (and) social skills, not so good in terms of fine motor. Number and even reading, he's confident" (T1P5DI146). Penny considered various interactions between speech-language development and educational outcomes. Her initial priority was the child's need for support with speech-language development rather than with literacy or numeracy learning outcomes (CBRD24/2/00; CBRD16/3/00).

Penny's second example was a child whom she considered to be at educational risk only after analysing the child's results from a classroom-based phonological awareness assessment. Penny was surprised by the child's poor results and reported:

> Sarah is confident in all other areas. She's happy to speak, she doesn't have any problem with that… she's got very good social skills, she's very good with her routine, she's very good at listening (and) fitting into the classroom.

> I'm very happy with her as a student (T1P5DI142). There's a little discrepancy in her speech. But she has no concept of rhyme. I say that (knowing) how important the rhyme concept is and how it affects their other language development' (T1P5DI19-20).

Here Penny identified the possibility of poor phonological awareness impacting on literacy outcomes. She planned to monitor Sarah's response to explicit phonological teaching. By doing so, Penny considered the importance of language development for classroom learning and the possibility of speech development problems being independent of other learning area outcomes. Overall, the specificity of her discussion of interactions between speech-language development and educational risk set her apart from other teachers.

In comparison, Teacher 9, Toni, provided a general representation of educational risk in early childhood classrooms. Toni described educational risk in terms of a child's general inability to do set tasks, as a consequence of reduced learning ability (T2TDI34-40). Her personal constructs and student examples specified that "priority children" had difficulty following the teacher's instructions. Like other teachers Toni referred to students at educational risk as "priority children." I encouraged the alternative term "focus children" during the course of this study to clarify that our shared purpose was to focus on assessing / monitoring these children and planning changes in classroom teaching and learning practices as required. As well as negotiating which children were at educational risk, the teachers and I attended to better recognizing students' learning strengths (T2TDI181; T2TDI185). Our common focus was on meeting students' educational needs, co-constructively.

Toni described her students at educational risk, collectively, as follows:

> Every time we do an activity, it doesn't matter if it's maths or language, they need help. They need 1-1… They just can't listen and go away and do it (T2T9DI34-35). I just find that…you talk to (kids) and most kids will get it. They'll be able to go away and do it… you know straight away that (students at risk) will not comprehend what you're saying…. They will go away and no matter how hard they try, they just can't do it (T2T9DI38-40).

Toni referred to the reduced general learning ability of children at educational risk several times during the initial interview. She believed, “It’s not because they don’t want to try, it’s just because they can’t do it” (T2T9DI37). “They’re always going to be behind” (T2T9DI68). Toni also spoke about individual students at risk, “He’s not an attention seeker or anything, he’s… very quiet. He’ll do everything but he’ll just be completely off track. You know he’ll try his hardest (but it’s) not even what I asked” him to do (T2T9DI185).

Initially I interpreted Toni’s construct of students at educational risk as a cognitive deficit view. However, analysis of Toni’s other comments and student examples showed that she also considered social difficulties and uncooperative behaviour as contributing to students’ educational risk. She commented:

> It’s nothing to do with academics. It’s purely her concentration because… she’ll play by herself… it’s obviously some sort of social type thing… she can’t relate to other kids or other kids don’t want to be around her… nothing to do with her ability or anything. I told her what to write, she just refused to do it. She likes to do what she wants (T2T9DI46-48).

Toni did not specify speech-language components in educational risk during Term One. Nor did she provide any evidence of speech-language impairment being included in her construct of educational risk as reduced general learning ability. (Later data from Toni show how she became more specific in her description of students’ educational risk during this study.)

Teacher 1, Jacqui, provided another perspective on educational risk. Her construct of educational risk meant:

> The child is at risk of not succeeding at school or with their education… sometimes it’s difficult to see if they’re really at risk educationally or if they might just be a little bit developmentally delayed which I suppose… can really be a risk (TKJ1DI1).

Like Penny, Jacqui attempted to distinguish between educational risk and developmental immaturity. A number of times during the school year, and particularly during school Term One, Jacqui acknowledged difficulty in making judgements about the extent and significance of educational risk for individual students. She was not confident to identify children at risk early in the school year TKJDI1-2; TKJDI24). By contrast, previous examples show Penny's relative confidence when identifying students at risk. Penny believed that other teachers needed to distinguish between language-based educational risk and developmental immaturity although her own experiences taught her that the distinction between these constructs could be complex. (See Penny's example of Sarah, above.) From the outset of this study Penny specified oral language components in her judgements of educational risk (CBRD16/3/00). All other teachers described educational risk in general rather than explicit terms.

Term One data confirmed that every teacher considered characteristics of educational risk that were not language-based. For example, Jacqui referred to a child as:

> being at risk…. not just with his language, from observing his behaviour and things like that. Just his communication with his peers (TKJ1DI3) I feel the way they fit socially into a classroom has a lot to do with how they succeed educationally as well (TKJ1DI6).

Penny showed awareness of non-language factors impacting on students' educational outcomes. She said of one student, "his fine motor control is quite bad… there's other things like… social skills or whatever" (T1P5DI30 & DI36). Toni explored the possibility of motor components to educational risk. She referred to skills like "cutting out, colouring in…. There's obviously that fine motor" issue (T2T9DI63). These data provided insight into teachers' constructs of the impact of educational risk on other learning areas.

Preliminary data analysis specific to Analytical Statement 1 (AS1) indicated that AS1 needed to be modified. All the early childhood teacher participants construed some personal theory of educational risk but few teachers specifically described *language-based* educational risk. Hence, AS1 was rewritten, *All early childhood*

teachers construe a personal theory of educational risk (AS1b). The 'b' indicates that the Analytical Statement has been amended as a result of data analysis.

Having established teachers' personal constructs of educational risk during school Term One, I shared the more specific construct of language-based educational risk, as suggested by Rohl and Milton (2002) and Rohl and Rivalland (2002). The broader term *educational risk* continued to be used in daily interaction with early childhood teachers to accommodate their array of personal constructs of educational risk. For the same reason, *educational risk* was used in subsequent analytical statements. However, the participant researcher role provided opportunities to identify and discuss language components in educational risk as a way to build shared meanings and begin to negotiate teaching practice with classroom teachers.

Teachers' language forms were documented as a way to track changes in teachers' thoughts and practice through the research year. Bannister and Fransella (1974) discuss how personal constructs can be identified as "tight" or "loose." They work from Kelly's definition of "a tight construct" being "unvarying" and "a loose construct" being like "a continuing interpretation" (p. 33). During this study, teachers' personal constructs were interpreted as being tight or loose dependent on the teachers' response to change opportunities. In this context, loose constructs were those that developed and were shaped by the co-constructive experience. Tight constructs were those that appeared unchanged as an outcome of co-constructed classroom language development.

In matching data to AS1, a preliminary response to Analytical Statement 4 is also provided. AS4 states, *Few early childhood teachers include specific characteristics of oral and written language impairment in their descriptions and accounts of children with language-based educational risk.* Term One data illustrated that only Penny discussed specific characteristics of language-based educational risk. Participant observation and initial teacher interview data facilitated analysis of how early childhood teachers identified (language-based) educational risk. AS4 was not amended in Term One. Later data confirmed that teachers became more explicit in their discussion of language-based educational risk during the school year.

The impact of language development on other learning areas

In order to co-construct classroom language development practices for students at educational risk, I needed to ascertain teachers' understandings of the impact of oral and written language development on other learning areas. During Term One, I discussed teachers' thoughts about early childhood language development and whether or not they perceived oral and written language development as determining progress in other learning areas.

I have discussed how teachers (other than Penny) used comparatively general terminology to express their understandings of educational risk. Jacqui distinguished between speech-language impairment and English as a Second Language (ESL) learning needs when predicting educational outcomes for her students. She qualified her speech-language concerns about Kindergarten students as she discussed her perceptions of their educational risk. For example:

> Laura seems a bright, little girl but with her hearing and speech problems that could make things difficult for her later if that's not rectified... Chloe's on the ball and probably by the end of this year she'll be speaking fairly fluent English at school anyway. Basically it's just that she's an ESL child. Lisa, with her unclear speech, I wouldn't really say that she's at risk educationally… because she loves to communicate so much… as long as it's looked at this year, she will overcome that. (TKJ1DI7-9).

Toni focused on the quality of classroom products produced by children at educational risk (T2TDI74-75). She did not refer to possible reasons for reduced learning outcomes or discuss the implications of innate learning ability for classroom teaching and learning processes. This is despite opportunities created during the initial interview to consider teaching processes, learning opportunities and classroom products. More than any other teacher, Toni used my participant observer role and her initial interview to ask frequent questions about educational risk, classroom language development strategies and educational outcomes (T2TDI132-139). I interpreted these questions as Toni's coming to terms with the priorities and practices of early childhood classrooms, after many years of teaching upper primary students.

Her questions were documented and revisited as part of the co-construction of language development theory and classroom practices during subsequent action research cycles. Toni did not articulate clear constructs about the impact of language development on other learning areas but she demonstrated an intention to learn about language development, educational risk and teaching and learning in early childhood classrooms (CBRD18/2/00, CBRD28/2/00).

During Term One, data confirmed that both Penny and Jacqui were considering oral language development as significant to students' learning outcomes across learning areas. Jacqui and Penny tried to make links between speech-language development and educational outcomes, albeit with contrastive levels of detail. Penny focused on the relationship between speech-language development and educational risk. Jacqui acknowledged the possibility of language components in educational risk but also regarded difficulties with peer interaction as important indicators of educational risk. Toni referred to children's understanding of teachers' instructions and classroom tasks as indicators of educational potential. Each teacher's personal constructs needed to be unpacked further, and verified.

Term One data made clear that most teachers predicted learning outcomes for students at educational risk from general constructs of language and learning, rather than from acknowledgement of specific links between oral and written language interactions. Similarly, Rohl and Rivalland (2002) found that without specialist diagnoses "it was often difficult for teachers to ascertain the nature of the (educational) difficulty" (p. 33). Like Rohl and Rivalland (1999), my goal was to support teachers to support students with literacy learning difficulties.

In the current study, data clearly demonstrate the benefits of eliciting and interpreting teachers' constructs of educational risk prior to co-constructing appropriate classroom practice. This intentional understanding of alternative constructs in our shared classrooms became a guiding principle of co-construction theory and practice. The elicitation of teachers' personal constructs of educational risk was the first step in the process of determining links between teacher thought and pedagogy (CBRD18/2/00). Later, Maree's story illustrates how the inadequate sharing of personal constructs can compromise the quality of co-constructed planning.

The representation of action research data

The first action research cycle showed that a cursory view of teachers' interview and classroom data was insufficient to represent how early childhood teachers' personal constructs of educational risk determine classroom practice. Although representing real teachers in classrooms, Term One data could not substantiate the influence of, and changes to, personal constructs for individual teachers over time. The selection of Term One data from Jacqui, Penny and Toni illustrated contrasts amongst early childhood teachers' personal constructs in one school context. As discussed by Fehring (1999) selective analysis and reporting enables researchers to highlight interpretations (and later generalizations) from data, rather than to systematically present all teachers' data for the sake of thoroughness without purpose.

Each of the ten teachers participating in this study provided data for purposive sampling. Fehring (1999) uses earlier work by Lincoln and Guba to explain that data from some teachers will stand alone and not represent the teachers as a collective group. Here, Penny represents an "extreme" example of early childhood teacher participants since her personal constructs identify language-based educational risk more specifically than any other teacher. Data from Jacqui and Toni begin to illustrate the extent of variation in teachers' personal constructs of language-based educational risk. In turn, data from other teacher participants (Coral, Suze, Peta and particularly Maree) are used to substantiate this interpretation as the narrative develops. Penny's data are used regularly, because they are unlike other teachers. Her story does not represent the thoughts and practices of others in this ten-teacher group but it indicates one possible outcome of co-construction.

As analytical statements are matched to data and accepted, refined or rejected, Penny's story continues to be atypical. Additional data show how Penny is also more intentional in her speech, language and literacy assessment of students at educational risk than the other teachers. Most of the teachers used some spontaneous classroom observation and oral and written language samples to identify educational risk. In addition, Penny systematically and intentionally assessed language components, such as phonological awareness, from school Term One (CBRD24/2/00). Penny's data draw attention to the influence of greater detail in constructs of language-based

educational risk on classroom language development practices. Penny used student assessment and monitoring to plan changes to her teaching practices and students' learning experiences. Penny's enthusiasm for co-constructed language planning facilitated the co-construction and documentation of further changes in thought and pedagogy.

Other teachers' data offer alternative opportunities for analysis and interpretation (re Suze in CBRD18/2/00). Toni's data allow analysis of the influence of a general view of educational risk on classroom language development practices. Her data also bring to question, the malleability of broad constructs as an outcome of co-constructed language development planning.

During school term One, Penny and Toni represented opposite extremes in the specificity of their constructs of educational risk. Penny's detailed view, with implications for selecting and implementing intentional teaching practices was contrasted by Toni's general view of students with reduced ability to learn. Toni did not identify implications for changes in teaching practice at this stage. Retrospectively, Jacqui's data were identified as more "typical" of teachers in this participant action research. Jacqui's constructs and practices sit mid-way on a theoretical continuum between the specificity of Penny's constructs and relatively general constructs expressed by Toni. Like other teachers, Jacqui considered and discussed issues such as the implications of global developmental delay versus specific educational risk during school Term One.

Term One data indicated teachers' initial thinking about educational risk and the variation in personal constructs held by teachers at this stage of the project. Personal construct theory supports data that show how each teacher's unique collection of experiences and influences contributes to her current worldview. This knowing about teachers' personal constructs and classroom language development practices served as a cautious response to Analytical Statements 1 to 4 and as a baseline against which co-constructed changes in thought and practices could be analysed during the school year. Next, data analysis focused on the processes teachers used to identify students at risk.

Early childhood teachers' identification of students at educational risk

During initial interviews, teachers explained how they identified students at risk. The weeks of classroom participant observation allowed me to observe how teachers identified, or overlooked, students' educational risk. Teachers were observed interacting with children in one-to-one activities such as daily reading and process writing time (CBRD8/2/00-20/3/00). I also had opportunity to interact with individual early childhood students and to participate in small group and whole class activities initiated by each classroom teacher. In this way the teachers and I formed and shared professional opinions about which children displayed characteristics of educational risk.

Teacher data indicated that early childhood teachers had many ways to identify educational risk in their students. When asked to comment on their identification of children at risk during Term One, teachers referred to their levels of expertise and confidence as influencing their task. Many teachers expressed a lack of confidence in their accurate identification of students at risk (CBRD18/2/00 re Toni, Peta & Suze). These teachers explained their lack of confidence as an outcome of their limited expertise with early childhood language development and students at educational risk. In accord with earlier analyses, teachers' reflections showed a general acceptance of the construct and reality of students at educational risk but relative unease when asked to identify and substantiate their identification of individual students independently (ibid). All of the teachers acknowledged in some way that managing children at educational risk was "part of teaching" (T2T9DI32) yet they declared low levels of confidence in doing so. (Penny was again the exception to this group trend).

In their own words, all teachers (including Penny) perceived that some expertise with child language development or educational risk was necessary to accurately and confidently identify students at risk. Yet all teachers described and nominated students at risk to illustrate their personal constructs of educational risk during initial interviews. Therefore one can say (to amend AS2) that *early childhood teachers identify educational risk during routine classroom practice and in accordance with*

their personal constructs of educational risk (AS2b). One cannot say that all early childhood teachers identify speech-language-hearing components in educational risk. It is important to note that during classroom participant observation weeks, only Penny intentionally elicited oral and written language data to identify and substantiate educational risk from classroom activities. Therefore, Analytical Statement 3 was also amended from *some*, to, *One early childhood teacher intentionally elicited data to identify and describe language-based educational risk in early childhood students* (AS3b). Only Penny included specific characteristics of oral and written language impairment in her account of children at educational risk (as stated in AS4). This preliminary analysis of early childhood teachers in one school is again in accord with the Rohl and Milton (2002) study that found "relatively few schools seemed to be assessing oral language" although most of them had students with known speech and language difficulties (p. 44).

Throughout this study I believed that the process of co-construction could further unpack the apparent relationship between teachers' personal constructs of educational risk, their hesitant identification of students at risk and their reported need for greater expertise to manage students at risk in early childhood classrooms. The participant observer role had provided various opportunities for me to identify students at educational risk. Term One interactions with teachers in their classrooms provided access to students at educational risk during routine classroom activities. Group language interactions, individual oral language tasks, daily reading, book sharing and early writing tasks were some of the classroom activities in which students could be monitored and identified (CBRD21/3/00-7/4/00). Generally, classroom teachers in this study did not use the informal opportunities to identify and describe educational risk in early childhood students during the first weeks of the school year. Neither were more formal oral and written language assessment tasks observed.

Tripp's (1993) work showed that teachers make routine practical judgments easily and use reflective judgements regularly. He states that practical, diagnostic, reflective, and critical judgements are all necessary to professional teaching but that classroom teachers make diagnostic and critical judgements infrequently. The move to *Outcomes and standards frameworks* (Education Department of Western

Australia, 1998) encourages teachers to continuously monitor student progress against specified levels. At the time of data collection, outcome levels were not being used in the project school but teachers were becoming aware of the principles of outcomes focused education. I considered whether teachers might be using classroom data to substantiate their identification of students at risk but feeling that their "incidental" assessments and "on balance judgements" were invalid in the context of qualitative research or the change to student outcome statements. The issue of teacher confidence to report their professional judgements arose again.

There was little evidence that the study teachers were aware of how routine classroom practice could provide data about students' educational risk or speech-language difficulties. Another question arising from the first action research cycle was whether early childhood teachers used available classroom data implicitly. For example, Toni acknowledged her use of "hunches" and her reliance on the judgements of others (including parents) to identify students at educational risk (T2T9DI134-138). She used spelling test scores as evidence of students' educational risk (T2T9DI53-55). She did not analyse teaching-learning strategies to make these judgements.

Teachers, whose personal constructs of early childhood education do not include awareness of the range of strategies children use to attempt or complete tasks, possibly overlook classroom observation and work samples as useful indicators of educational risk. Routine classroom data, such as daily reading and students' writing samples, have the potential to inform teachers about learning processes, learning products and required teaching. Previous studies (Batten & Marland, 1993; Calderhead, 1984; Carlgren, et al., 1994) discuss the need to make tacit knowledge, collated in the busyness of classrooms, explicit. How individual teachers extract explicit understandings from tacit classroom routines might depend on the teachers' constructs of educational risk, as well as, the diagnostic potential of the classroom task. Teachers "say how something appears" rather than what, theoretically, "is" (Pope & Keen, 1981, p. 30). Accordingly, current research recommends:

> All schools need to have in place systematic procedures for assessing oral language, literacy and numeracy in order to identify students with learning

> difficulties as early as possible in their school careers so that appropriate intervention can be implemented for all children who need it (Rohl & Milton, 2002, pp. 45-46).

Teachers' constructs and classroom data

Previous examples illustrate variation in teachers' emphases as they identified educational risk for particular students. Jacqui noted social indicators of educational risk; Penny commented on speech-language characteristics during oral and written classroom activities; and Toni observed students' responses to a range of classroom tasks. Further examples of teachers' reflections on classroom data indicate how teachers drew conclusions about children at educational risk from observing and interacting with them as part of their classroom routine. These teacher reflections could be used to begin to co-construct further teaching and learning activities.

Teacher-researcher interactions during Term One elicited examples of teachers intentionally manipulating the classroom routine to attend to children individually. For example, Toni reported that the Teacher Assistant supervised news-telling with the whole class once a week while Toni listened to students reading individually. Discussion clarified why Toni structured these reading sessions. "My attitude is, the more they're reading, the better they'll get so I just think the more one-to-one (they) can get… it'll have to benefit them" (T2T9DI116). Understanding Toni's thinking about individual reading sessions, I was able to suggest, model and support her use of individual reading instruction at these times. For example, running records (Clay, 2002) can direct the teaching or reinforcement of particular reading strategies as required for individual or small groups of students.

In this way, my interpretations of teacher reflections on classroom practice facilitated the beginnings of co-construction. The premise was that the reciprocal sharing essential in co-construction could make implicit knowledge and shared learning, explicit. Later in the year Toni acknowledged how useful it was for students' difficulties to be described to her. She reported that she had been unaware of one child's speech-language difficulty until his mother explained the difficulty to her.

Toni believed she would not have identified characteristics of educational risk for individual students without information from others.

Jacqui's reflections indicated that despite her apparent lack of confidence with very young students at risk, she had selected and implemented strategies to support the learning of individual children. She used classroom examples to clarify her judgement processes. An example follows:

> I'm definitely concerned about Danica… she is at risk concerning her hearing and her speech. (Her) singing (is) quite unusual…. Today I made sure I was in front and she was looking…. She looks at my face as if she knows it might help her and when she actually gets some of the words, like 'my hands' she'll be singing 'hands' when I'm onto the next line' (TKJ1DI12-14).

In this and other examples, Jacqui was aware of students' strengths, as well as, their needs for language development support. Jacqui said of another child, 'She loves to talk and tell stories… she's not one of these really quiet children who has speech problems' (TKJ1DI20-21). From this sharing, we were able to review the effectiveness of Jacqui's current teaching strategies and plan additional strategies for individual children as required. Jacqui clarified her commitment to supporting children at educational risk. She referred to her previous use of specialist programs in other early childhood classrooms (TKJDI28-29). Later in the year, Jacqui was supported to conduct her own speech-language assessments within her classroom. That part of her story is detailed with the development of co-construction in Chapter 5. It is an example of how co-constructive processes shaped the personal constructs of both the teacher and the researcher, albeit in different ways.

Penny specified differences in the way children at risk approached classroom tasks, as well as, how they continued with them. She gave examples of the same child in different learning contexts to show awareness of the child's strengths and risk factors. For example:

> When we've been doing free writing… they can just have-a-go, that's when I notice Rose. Her confidence is very low. Most children will have-a-go even

> when it's not even the right letter, they'll have-a go... but Rose is very under confident with that (T1P5DI23-25). She's very good at working independently once she has a task… she's having trouble with attention on the mat… mainly on the mat. She just needs reminding (T1P5DI49).

Penny's comment about cueing the child's attention indicates her consideration for how she might assist children at risk. She also reflected on her responsibility as the classroom teacher to identify children at educational risk, 'I see it as really, really important… if I don't see it, then it'll be missed 'til (next year).… So I'm on the lookout for different things' (T1O5DI11-12). Penny was eager to co-construct classroom language development plans. She continuously reflected on her strengths and needs as a classroom teacher, making connections to the needs of individual students in her class. One example comes from Penny's use of the Phonological Awareness Screening Test (Henty, 1994) with each of her Year 1 students during Term One. Penny sought a more detailed awareness of the students' phonological development. She reflected on a particular student, "I'd just like to know a little bit more about her. Is this impacting on her learning, not being able to rhyme?" (T1P5DI43). Penny's classroom assessment providing child-specific information directed her thinking and provided a focus for teacher-researcher co-construction.

Some early childhood teachers used standardized tests or opinions from specialist service providers to substantiate their impressions of educational risk during the research year. They gave various reasons for their use of standardized assessments. For example, Toni used the *South Australian Spelling Test* (Westwood, 1979) to assign a spelling age to each student. She ranked students on the basis of test results and communicated these quantitative scores to parents. Toni and Coral participated in full class assessments of the *Quest, Reading Screening Test* (Robertson, Robertson, Fisher, Henderson & Gibson, 1995) to gather baseline data on new students. Another teacher had recommended the *Quest* to Toni as a multiple-choice sample of students' word identification and reading comprehension (CBRD3/2/00). The *Quest* does not include a running record of reading or analysis of learning strategies.

During Term One most teachers who used standardized assessments did so to gain general insights into student performance rather than to identify features of language-based educational risk or to specifically inform classroom practice. Teacher reflections on the usefulness (or otherwise) of standardized testing were used to begin discussions or negotiate changes to teacher thinking and classroom practice. Co-construction began with an agreed need to develop detailed understandings of students at risk.

Sharing Oral & Written Language Data: The beginning of co-construction

Early in the data collection year (CBRD7/3/00), Penny reflected on the benefits of our practical in-class sharing during her first year of teaching (1999). Penny reported growth in her language expertise and classroom confidence as an outcome of our shared planning, specific to children with language-based educational risk. I noted that the process of negotiating how we could work together, as well as, what we would focus on, had enhanced my understanding of teachers' classroom-based support needs. Both Penny and I had experienced ways in which co-constructive language planning shaped our personal constructs of language-based educational risk and subsequent classroom language development practices. Penny reported, "You just pinpointed little things so I could understand them" (T1P5DI2). She believed that learning about students at educational risk in her first year of teaching had enabled her to identify students quickly and confidently in her second year.

Calderhead (1984) discusses teacher training and the graduate experience. He suggests that graduates have a need for support until they find their niche in school systems. I was aware that this need could have contributed to Penny's positive response to our initial attempts to co-construct classroom language practice. Nevertheless, other participant teachers recognized Penny's confidence and expertise during the project year. They compared Penny's explicit language expertise to their own, crediting her expertise to our negotiated classroom practice the previous year.

It is important to reiterate that the theory and practice of co-construction was not identified in 1999 when Penny and I first negotiated how and why we would work together. However, our shared experiences influenced this subsequent research.

Penny and I believed in sharing our thinking, combining our expertise and applying our negotiated thinking and practice in the classroom. However, the principles of co-construction were made more explicit by the continuous sharing, negotiation, reflection and action in 2000 and during the writing of this research thesis.

In previous discussion I have explained that the Oral and Written Language Database (OWLD) was designed during Term One, in response to teachers' reported needs for detailed information specifying characteristics of educational risk for individual students. Collectively, teachers indicated a need for practical strategies for supporting students at risk in early childhood classrooms. Jacqui wanted, "someone who knows exactly what they're doing and can really identify what the problem is, which is hard with such young children often, because there's all sorts of things going on with their language" (TKJ1DI55). Some teachers, including Jacqui, were interested in learning to better identify children at educational risk themselves.

Penny requested assistance to prioritise educational risk in her students and to clarify her assessment interpretations using her Term One data. After describing each child's speech, language and classroom learning in some detail, Penny identified a need for support to prioritise her management of students at risk in different learning areas (T1PDI12; T1PDI136-138). Toni also identified a need for assessment information. She discussed "the type of kids (who) need testing" because "You have a hunch about them but once you see the test" you understand the problem (T2T9DI186-7). Toni continued,

> It'd be nice to have some concrete… testing that would give you… where they're at. I know that they're poor but how poor are they? What is it they actually can't do? (T2T9DI136-7) I think you just need to find out exactly what the problem is (T2T9DI139). That's what I need to know (T2T9DI190).

Discussion of the purposes of assessment made clear Toni's view of links between educational risk assessment and teaching content. Her understanding was of literacy development as sequential, graded content mastery. "You might be teaching Year 5 level but you can give them Year 3 if that's what they need. ... How much less can you give them?" (T2T9DI50-52). Conversely, I understood literacy development as a

continuous process of purposeful engagement with oral and written language activities in which the child's awareness of literacy learning strategies (and the teachers' awareness of explicit literacy teaching strategies) was important. Classroom products could be useful samples of purposeful learning and student outcomes but were not more important than learning and teaching processes. These alternative views of literacy development have arisen many times since this negotiation with Toni. They reinforce the importance of sharing personal constructs of literacy teaching and learning prior to co-constructing classroom practice.

Similarly, teacher participants' constructs and needs during Term One influenced the content and processes of collating and reporting assessment data for students at risk. Teachers' needs for assessment information, linked to the selection and implementation of classroom language development strategies, were considered when designing the OWLD. For example, during Jacqui's initial interview and on-going classroom interactions she confirmed, "I'd be quite happy to just have the guidance and the expertise to say, 'Look… these couple of children are having problems… try this with them'… I'd be quite happy to (try) that myself" (TKJ1DI53-54). Jacqui specified her needs for "things that you can do" as a classroom teacher. She wanted to be told, "that's their problem. This is where they're at risk" (TJK1DI57-58) but she also emphasized her request to understand the thinking behind classroom practice, "the process of what you're doing?" (TKJ1DI69).

Penny was clear about her intent to identify and respond to educational risk as best she could with available resources, early in the school year. Penny expected to negotiate (or co-construct) language development practices with me during the project year. She intended to make, "…at least a significant change. I want to be able to notice a difference" (T1P5DI138) in the learning outcomes of students at risk by the end of the school year.

Toni was supportive of the concept of co-constructed and classroom-based language support via the Language Development Project. She emphasized her intent to preserve children's confidence in their own abilities (T2Tdi87-88). However, she (correctly) predicted that language assessment data alone were unlikely to shape her

personal constructs of early language development or her classroom practice. Furthermore, Toni doubted the value of language support practices for children at educational risk. “The amount of improvement they’re going to make really isn’t going to be great over the years. They’re always going to be in this program, all the way through” (T2T9DI179). This comment was interpreted in the context of Toni’s focus on learning content rather than learning processes. I considered how the co-construction of the OWLD might support Toni to consider teaching and learning processes in addition to lesson products.

The provision of the OWLD was the practical start to co-constructive language planning. Based on both classroom and clinical language assessment procedures and materials, the OWLD was designed to indicate characteristics of language-based educational risk for individual students. The OWLD was intended to provide a starting point for negotiating the selection and implementation of classroom language development strategies with participant teachers. Hence, Analytical Statement 5 (AS5), *The provision of the OWLD assists early childhood teachers to understand and identify characteristics of language-based educational risk in their students.* Variation in teachers’ personal constructs of language-based educational risk and their individual pedagogies indicated that the OWLD would be used or valued in different ways by individual teachers. In addition, Term One data predicted that all teachers would need support to translate OWLD1 data to appropriate language development strategies for classroom use.

At the end of Term One, teachers’ responses to the OWLD1 were analysed to explore the influence of specialist language data on early childhood teachers’ understandings of language-based educational risk. The OWLD1 was reviewed and discussed with each teacher as part of co-constructed planning. All teachers agreed that the OWLD1 provided detailed assessment information about students at risk. Some teachers (for example, Penny) intended to apply diagnostic information to classroom practice. However all teachers agreed that the OWLD1 alone would not significantly shape teachers’ classroom language development practices for students at risk. Teachers confirmed their need for support to translate explicit assessment data to classroom practice. AS5 was amended, *The provision of an OWLD assists early childhood teachers to understand characteristics of language-based*

educational risk in their students. Teachers need support to co-construct classroom practice from diagnostic data (AS5b).

Action research cycle one demonstrated the limitations of providing oral and written language assessment information in response to teachers' needs to understand and plan for students at educational risk in early childhood classrooms. For most teachers, explicit data did not change teacher thinking or classroom practice. Recognition of the need to support teachers to translate diagnostic data to classroom practice is an important outcome of this study. (The implications for approaches to teacher support services, specific to classroom language development practices, are revisited in Chapter 7.)

Significantly, teachers' requests for specialist assessment information demonstrated how teachers could influence the content and process of co-construction. Their feedback on the OWLD1 prompted my consideration of how else teachers could influence the research process. What else could teachers teach me about factors shaping their personal constructs and classroom practices related to educational risk? Attention to the OWLD as a significant teacher resource was replaced with a research focus to the content and processes of teacher support services designed with, rather than for, teachers.

Teachers' requests for practical support to select and implement teaching and learning strategies for students at risk in early childhood classrooms, shaped further action research cycles. Teachers' requests were reinterpreted. Teachers wanted and needed to understand the indicators and assessment processes for students at risk. More importantly they wanted and needed to be involved in learning how assessment information could be translated into classroom practice. In this way, teacher input influenced the development of the co-construction process. Links between thought and practice had to be made explicit. At the end of Term One, planning for improved co-construction was based on participants' learning during Term One. I acknowledged that both teacher and researcher input were required to further develop co-construction through classroom-based action research.

Teacher confidence, language expertise and classroom practice

Analytical Statements 6 and 7, focused on teacher confidence and expertise as linked to the identification of students at risk. Analytical statement 6 read, *Early childhood teachers' confidence in their personal theories of child language development and (language-based) educational risk influences their ability to identify children at risk in their classrooms.* Analytical statement 7 followed, *Early childhood teachers' perceptions of themselves as having developed language expertise are predictive of their ability to identify (language-based) educational risk in their students*. These statements could not be adequately examined with Term One data.

Term One data suggested that teachers' confidence and expertise were linked. For example, Penny related her increased confidence with students at risk to her growth in practical language expertise during her first year of teaching. Jacqui also linked her classroom confidence to previously acquired language expertise. Both Penny and Jacqui were keen to work co-constructively in the classroom to further develop their language expertise and confidence. Penny and Jacqui were comfortable with the idea of reciprocal learning. They both requested practical support and offered opinions and described their current strategies for students at risk.

It was important to document strategies that participant teachers used prior to co-construction since the second action research cycle focused on the co-construction of additional classroom strategies for students at risk. However, given Penny's recognition of changes in her thinking and pedagogy during the previous year as we worked together (T1P5DI2, T1P5DI9-10); her research story focuses on continuous, rather than initial, change.

Participant observation and teacher interview data confirmed Jacqui's use of whole group and one-to-one teaching strategies for students at risk. Her speech-language experiences included:

- using game formats for teaching some speech sounds (TKJ1DI25-26)
- addressing language goals with books and puzzles with individual students (TJK1DI34)
- creating time to talk with particular children at risk (TKJ1DI35)

- talking individually to children during workbook activities (TKJ1DI38)
- ensuring everyone is looking at her during action rhymes (TKJ1DI41)
- reminding students of listening routines, eg. "look at me, eyes to me, let me see your face… so I know you're listening" (TKJ1DI43)
- giving strategies to parents to use at home (TJK1DI74).

Although Jacqui supported our plan for Term Two specific language development strategies, she was more confident about her use of previous strategies than about the selection and implementation of additional strategies. This difference was expected and interpreted in Vygotskian terms. Jacqui's previous strategies were within her zone of actual development. The co-construction of new strategies required a move through her zone of proximal development. Together, we decided that small groups of children would try planned speech-language activities with me in the classroom and then teach the activities to Jacqui (TJK1DI82).

During my participant observations and the initial teacher interview, Toni confidently reported using the following strategies to identify or respond to students at educational risk in early childhood classrooms:

- keeping an eye on quiet children who may need assistance but don't ask (T2T9DI44)
- building students' confidence to try because mistakes 'don't really matter' (T2T9DI87-88)
- trying to make instructions as simple as possible (T2T9DI103)
- visiting students at risk individually after giving group instructions, to see what they are doing (T2T9DI104)
- sitting students at risk next to more confident students (T2T9DI105)
- developing a class community, "We care about each other and we help each other learn. We work as a team. If you're not sure ask the person next to you" (T2T9DI106)
- having stronger students telling weaker students to "just do it this way" (T2T9DI108)
- having adult helpers in the classroom to help students at risk more often (T2T9DI112-113)

- not expecting as much of students at risk as of others students (T2T9DI124)
- reducing the amount and type of work students at risk are given (T2T9DI125)
- recognizing students who need "completely different" work (T2T9DI126)
- "going back to the basic blends" (T2T9DI127)
- asking others exactly what students are capable of (T2T9DI132)
- knowing, "You can't solve the problem overnight" (T2T9DI140)
- timetabling language support times to best suit the learners (T2T9DI146)
- knowing that some students at risk need concrete play (T2T9DI154)
- interviewing parents and saying, "this is where your child is at… this is what you can do" (T2T9DI156, 158)
- rationalizing how teacher time is spent (T2T9DI164)
- investigating 'hunches' about students by conducting or requesting assessments (T2T9DI186-187)
- wondering (T2T9DI192). Toni's "wondering" about students was displayed by her frequent asking of questions about them and their learning.

Toni was observed to be a confident classroom teacher who sought confirmation and direction in her management of students at risk from other teachers and myself. She engaged in lengthy discussion about our classroom observations of individual children and possible patterns of cause and effect related to educational risk. Toni relied on her Educational Assistant as "a very important resource because… I don't have the experience that she does" (T2T9DI171-172). Toni's regard for the role of parents in classrooms varied with the examples she used. She described how parents informed her of their child's educational risk and assisted in her class. At another time Toni commented that parents would "do anything for the kids, but the thing is we're teachers and we know how to do it. They don't have a clue what to do" (T2T9DI151-2). During Term One I interpreted Toni as a teacher seeking support with students at risk who was likely to judge the usefulness of co-construction according to how well her immediate needs were met.

Co-construction with Penny began with her description and demonstration of how she rotated small group language activities through the school week. She planned additional activities for small groups of children at risk, utilizing parent helpers for

oral and written language activities. She specified areas of interest for classroom activities and professional growth during the project year. We co-planned some classroom language development activities from the beginning of the project year. Penny also reported her independent, confident selection and implementation of classroom language development practices. Some examples of strategies Penny used to identify and work with students at risk, follow. Penny used:

- initial conversations with new students to sample their speech-language abilities (T1P5DI5-8)
- continuous monitoring of students' language, literacy, fine motor skills and approach to tasks, to identify indicators of risk ((T1P5DI12, T1P5DI30)
- specific assessments of phonological awareness (T1P5DI17-20, T1P5DI139-140) and *Literacy Net* (T1P5DI207-208) to plan teaching and learning
- a "have-a-go" classroom culture to encourage students' independence and confidence (T1P5DI127-128)
- reflective thinking on issues such as the difference between immaturity and learning disability (T1P5DI133-135)
- self-questioning to identify when she needed to know more about particular students (T1P5DI143)
- analysis of teaching-learning connections to determine when a student needed reminders of expected behaviours (T1P5DI149) versus differentiated teaching (T1P5DI157-158)
- explicit teaching of phonological abilities (T1P5DI154-156)
- explicit teaching of purposeful classroom listening (T1P5DI168-169)
- explicit teaching of purposeful writing eg. Birthday cards and letters (T1P5DI176-177)
- explicit teaching activities were always followed with supported practise
- specific activities for small groups of students to review taught activities eg. *Sound Bingo* (T1P5DI170, T1P5DI198)
- differentiation of tasks to various group members eg. one student repeats the teacher's instructions to other group members (T1P5DI183)
- monitoring of whole class interests, attitudes and behaviours when making decisions about classroom activities (T1P5DI172-173, T1P5DI190-191)

- awareness of factors such as hunger impacting on students' engagement (T1P5DI195)
- other adults (Educational Assistants, parents) to work with small groups of students on planned activities (T1P5DI200)
- use of my written reflections on our shared teaching to plan further teaching and learning tasks (T1P5DI208)

Term One data provided a preliminary view of the connections between teacher confidence, language expertise and classroom practice. However, relationships between teachers' personal constructs of language-based educational risk, their confidence to identify and respond to the needs of students at risk, and increments in their language expertise could not be analysed exhaustively with Term One data. Further data were needed to substantiate possible connections between the development of personal constructs, classroom confidence and language expertise, as related to educational risk in early childhood classrooms.

The development of co-construction in this study was uncertain until the close of research cycle one. Until then teacher-researcher relations and expectations were developing through shared class time, initial teacher interviews and critique of the OWLD. This necessarily cursory view of teachers' confidence and expertise respected that most teachers were cautious about expressing self-confidence and expertise early in the research year. They had welcomed the Language Development Project as a means to facilitate their professional development. All teachers accepted co-construction as an opportunity to gain expertise in the identification, planning and implementation of language development activities for students at risk through the year. Changes in teacher thinking, pedagogy, confidence and language expertise needed to be monitored over that time.

Interpreting constructs of practice

Teacher stories carry the development of co-construction and teacher change through further action research cycles and the revisiting of analytical statements, as necessary. The first action research cycle confirmed the potential for constructivist interpretive research in the school context. Data could be interpreted against the

conceptual background of personal construct and social judgment theory. For example, Toni's loose personal constructs needed to be constantly reinterpreted against her eagerness to refine her theory and develop her pedagogy for students at risk. The comparatively confident personal constructs held by Penny and Jacqui were expected to change with co-construction also, albeit for different reasons and via processes negotiated with the individual teachers.

From decision-making theory, ideas about cognitive continua and cognitive dissonance (Doherty & Kurz, 1996) could be used to theorize about the possibilities of co-constructing thinking and practice with early childhood teachers. Doherty & Kurz (1996) discuss Cognitive Continuum Theory (CCT) to explain how individuals simultaneously consider the task at hand and the cognitive processes required for that task. Participants' personal preferences for intuitive versus analytical decision-making (Doherty & Kurz, 1996) might be used to investigate the importance of compatible cognitive styles to the outcomes of co-constructed language planning. Doherty and Kurz (1996) reject the idea that cognition is either analytical or intuitive, referring instead to *quasirationality* as "the most common sort of cognition" and including "elements of both intuitive and analytical cognition" (p. 130). The CCT framework "has been used to help understand individual judgement and decision making" (p.135). This theory is considered when analysing teacher-researcher co-constructed decisions in subsequent chapters.

A social judgement theory approach could investigate participants' latitudes of acceptance, rejection and non-commitment. One could investigate, for example, whether cognitive dissonance was more or less of a problem than a latitude of rejection (Curtis, 1999; Orban, 1999) when co-constructing language practice. Like appreciative inquiry, these theories attend to influences on the content and process of decision-making. They provide a conceptual background, but not method, for working co-constructively with early childhood teachers.

Teachers provided data about how personal constructs determine classroom practice and how co-constructive language planning might shape both constructs and pedagogy. The ethics of classroom-based action research give value to each teacher's participation. During the year, each teacher contributed to our learning about ways to

engage in teacher-researcher constructivist interpretations. This study was not an evaluation of teachers' personal constructs and classroom practice. Instead, the idiosyncrasies of individual teachers enhanced data collection by better representing real teachers' responses to educational risk in classrooms.

The active participation of teachers in the first action research cycle confirmed a commitment to the co-construction of language development plans from Term Two. At that point, participants understood and valued personal constructs of educational risk but were yet to negotiate the specifics of content and processes for co-construction. We knew that assessment data alone did not strongly influence teacher thinking and pedagogy.

Here was the evidence-based beginning of co-construction. Yinger's (1990) expression had come to life: 'The conversation of practice can be learned but not taught' (1990, p. 92). Teachers' initial requests for detailed information about students at risk had convinced me that such data might be influential. Theory provided a model of teacher decision-making about students at risk. Yet it was only through immersion in eight early childhood classrooms and regular interaction with teachers that I learnt about teachers' thoughts and practice. New ways of seeing connections between individual teachers, their constructs of practice, the teaching task and classroom contexts were learned through immersion, interaction, reflection and interpretation. In various ways teachers modeled the subtle importance of their self-perceptions of confidence and expertise. By working with individual teachers I was learning to interpret constructs of classroom practice and to recognize influential factors in change.

Summary

Examples from the stories of Jacqui, Penny and Toni give recognition and value to the importance of teacher difference in this study. This representation of early childhood language development practice sets the scene for later explanations of variation in the content and processes of co-constructive language planning with individual teachers. In Chapter 5, I report on action research cycles two and three to explain how transitions occurred in teachers' thinking and pedagogy. The revisiting of research questions with subsequent data, demonstrates the relative merit of thick data for trustworthy and credible classroom-based participatory action research.

[1] Pseudonyms are all female. (Nine of the ten teacher participants were female). Female personal pronouns are used through this text to representative the predominance of female teachers in early childhood positions.