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

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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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A thesis submitted to The Graduate School of Education
University of Notre Dame Australia

In fulfilment of the requirements for the degree of
Doctor of Philosophy
2005
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## Chapter 1

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Abstract

Current research confirms that high quality teaching makes the difference in students’ learning outcomes. In addition, contemporary views of teacher education highlight the benefits of teachers being involved as active learners in their own professional development and whole school planning. This research examines processes by which teachers construct change in their thinking and classroom practice to better meet the needs of students at educational risk in early childhood classrooms. Ten early childhood teachers, in one rural primary school were supported in their professional growth by the participant researcher.

The most important outcome of this teacher-researcher action learning project was the development of “co-constructed” learning processes in classrooms. Teachers valued co-constructed practice more than the development and use of an Oral and Written Language Database (OWLD) for each student at risk. Teachers negotiated their individual beliefs about child language development, literacy learning and early childhood pedagogy with the participant researcher in order to plan, implement and reflect on effective classroom practice from Kindergarten to school Year Two. Participant observer and participant researcher roles sustained the collection of teacher interview data, oral and written language samples, classroom language plans, critical language teaching - learning incidents, and student learning outcomes during one school year.

Comprehensive teacher data are reported through structured narrative to confirm that co-constructed classroom language development practice made participants’ thoughts explicit and enhanced their practice. Co-constructed classroom practice engaged participants in learning about teaching in their classrooms and schools, effecting sustained change for all participants. This study verifies factors shaping change in teachers’ thought and pedagogy. It emphasizes interactive and reciprocal learning as catalysts for self-reflection and developing knowledge and expertise. Positive implications for the co-construction of school-based language support services, teacher education and for managing whole-school change are discussed.
Declaration of Authorship

This thesis is presented for examination as my own work. None of the material contained herein has been previously submitted for degree or diploma awards in a tertiary institution.

To the best of my knowledge, all materials quoted or referenced in this thesis are used within existing copyright and intellectual property right legislation.

The Ethics Committee of the University of Notre Dame Australia scrutinised this school-based research at the proposal stage. Professor Tony Ryan of the University of Notre Dame provided further critical comment. Professor Ann Zubrick supervised this research throughout the project.

I declare my authorship of this thesis. This work is an outcome of qualitative inquiry co-constructed with ten early childhood teachers and other members of one school community.

_________________
Carmel P. Bochenek
17.1.05
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Garry. My deepest gratitude is to him.
Prologue

My daily challenge as a literacy specialist is to know how best to support ordinary teachers to move forward as learners, whilst also moving students to achieve new learning outcomes. Time to reflect on teachers’ thoughts, practices and learning processes is a luxury, a contrast to the demands and pace of classrooms. Time to engage with other teachers to determine influential factors in their own learning processes comes only rarely. Indeed many of the teachers who over the last twenty years have helped shape my thinking and practice in primary schools, will be unaware of their contribution to this work.

Supervised research provided me with an opportunity to reflect on current theories of teacher decision-making, to investigate influences on teachers’ decision-making processes, and to find means to support teacher and researcher growth. Relatively few researchers work each week in classrooms with ordinary (not exemplary) classroom teachers. Without this experience how do we find ways to support ordinary teachers to become highly effective?

This thesis almost began in several places before it became a classroom-based action research project. From these scattered beginnings, my research goals and intended outcomes changed as a consequence of my developing thought and practice. For twenty years I have been engrossed and challenged by a need to create optimal teaching environments and learning experiences for young students at educational risk. Many day-to-day moments (spent with teachers and students at educational risk in early childhood or primary classrooms) now stand out among a collection of memories of where risk impacts on literacy teaching and learning. These moments eventually culminated in my drive to co-construct a theory of practice with, rather than for, teachers, students, parents and school administrators.

In the early 1980s students with diagnosable speech-language-hearing impairments were managed from a deficit perspective. If time, resources and geographical proximity allowed, such students left their classrooms to attend speech pathology sessions. Skilled speech-language pathologists worked to ‘fix’ the diagnosed impairment, theoretically minimizing the impact of speech-language-hearing
impairment on literacy acquisition and classroom learning. I wondered why students left classrooms and why speech pathologists laboured to mimic classroom tasks in clinics. I was troubled by the assumption that clinical services could be transferred to classrooms, if only teachers would adopt comparable clinical practices. I noted that as teachers enthusiastically asked speech pathologists for teaching and learning strategies for use in their classrooms, I (like many others) confidently provided “treatment” ideas. Recommendations made with the best intentions would later be discarded as inappropriate and unacceptable in classroom contexts.

Drawing upon my earlier undergraduate teaching experience and a genuine respect for teachers’ classroom expertise I sought further opportunities to work collaboratively with teachers in classrooms. I saw this as a way to experiment with what did and what didn’t work for students with characteristics of language-based educational risk, and their teachers. The next decade confronted me with what I didn’t know. How could dyspraxic students (who struggle to plan, initiate, imitate and sequence speech sounds) be well supported in early childhood classrooms? Is the construct of language disorder helpful in arriving at sound practice in inclusive early childhood classrooms? How might teachers provide differentiated language development opportunities during whole class, small group or individualised education activities? Where is the overlap between therapy activities, explicit teaching, authentic assessment and purposeful socially constructed learning? Why do therapists believe that students’ complex needs cannot be met in classroom contexts?

My working relationships with classroom teachers evolved as I changed professional hats. Some days I taught language genre, modelled and supported reading strategies, designed and implemented spelling practices, facilitated conferences about process writing and sought to empower students to become committed and purposeful learners. This was the era in which oral language was regarded as a precursor to written language development and student assessment was akin to scoring individuals’ progress against a hypothetical continuum of “normal” language development. On other days I worked with students, parents and teachers to trial, demonstrate and recommend ways to stimulate language development, correct speech, develop phonological awareness or compensate for impaired hearing and Central Auditory Processing Disorder. As students achieved new learning outcomes I
reflected on the roles of individual, clinical language services and the explicit teaching of reading, writing, speaking, listening and viewing in purposeful and engaging classroom contexts.

About this time, claims and counter claims muddied the waters of the speech pathology and education arenas I worked in. Teachers debated the importance of teaching phonics, whole language and the place (if any) of direct instruction. Speech pathologists argued the case for evidence-based practice including research showing the essential role of phonological awareness in reading acquisition. While speech pathologists used naturalistic language sampling and conversational analyses, teachers completed running records and miscue analyses. I found myself code switching between teacher-talk and clinical jargon as I taught, entered into collaborative planning, provided therapy, consulted, presented and participated in professional development sessions. Regardless, my roles were for a common end--improved learning outcomes for students at educational risk.

For some time I continued to code switch as I made classroom recommendations to teachers of students at educational risk and negotiated clinical tasks with children struggling with oral and written language tasks. Somewhere in the 1990s I became professionally bi-dialectal and exhausted. The language and “best practice” of teachers and speech pathologists was becoming incompatible.

The current research arose from this context. I recognized that teachers and speech pathologists, both highly skilled professionals, wanted to work together for improved student outcomes. I proposed to re-examine how clinical expertise might better meld with classroom practice for students at educational risk. The selection, planning and implementation of classroom language development practices would be evidence based, using standardized assessment procedures (from speech pathology) and classroom based assessments (from teaching). A school year was chosen as a natural cycle over which to demonstrate teachers’ (and my own) changed understandings of speech-language-hearing impairment and implications for classroom teaching and learning. I wanted to learn how to tailor teacher support to the strengths and needs of individual teachers and to gather evidence to argue the importance of specialist language data and specialist language expertise in classroom contexts.
This study did not unfold in this way. In later chapters, data and teacher stories explain the limitations of the initial action research approach and how final outcomes were shaped with teacher participants. All the teachers developed new skills in working with students at educational risk. However, a more important change occurred in my thinking about theory-practice relationships. These teachers taught me that until personal constructs are exchanged, valued and “co-constructed”, classroom practice would remain as a bi-dialectal, code-switching task. The most important feature of co-construction theory was the evolution of understandings about why and how learning between teachers and speech pathologists needs to be co-constructed. In practice, teacher stories demonstrated how co-construction developed to reflect participants’ shared beliefs, theories, practices and experiences.

This action research is reported as a structured narrative, focusing on four of the ten teacher participants. Data from these four teachers were most influential in the drawing of research generalizations. Collectively, the ten teacher stories are about the possibilities of change. This story is important because it features ordinary teachers in an ordinary school. The strengths and needs of individual participants contributed to the study outcomes reported here. The realities represented will be familiar to many in West Australian schools. This study shows what is possible for both teacher-speech pathologist and teacher-researcher partnerships in our schools.

Before beginning the literature review establishing the theoretical background and context for this study I recall the words of Barry (2002), “Listen to your informants and be prepared to be led to where they want to take you rather than you leading them to where you think they need to be taken” (p. 33). Indeed, the teachers in this study led me much further than I anticipated we could go together. Whilst hoping to learn how I might better provoke change in teacher thinking and pedagogy about students at educational risk in early childhood classrooms, we co-constructed a way of learning that has far broader application. The development, review and refinement of co-construction theory and practice has implications for effecting change in teacher thinking and pedagogy, building expertise within school systems, and facilitating future pedagogy, learning outcomes and school change. Together we were inspired by the practical possibility of us all working together as active learners.
Introduction

Effective classroom teachers are active and creative learners who respond sensitively and appropriately to classroom complexity. Participant observation confirms that individual teachers can “successfully respond to a situation or solve a problem when no set pattern for responding exists”; that they integrate their existing knowledge to solve new problems (Bennett & Rolheiser, 2001, p. 9). However, in order to support teachers working with students at educational risk in early childhood classrooms, I wanted and needed to know how and why some teachers integrate thought and experience to classroom practice more effectively than others. What determines teachers’ different responses to given students in classroom contexts? How might I support teachers to develop further, to make a difference for early childhood students at educational risk? So began this research.

I began with words from one of the ten early childhood teacher participants. This teacher, Penny¹, provides an insight into her thoughts about children at educational risk. She states, with conviction, a need for change in teacher thought and pedagogy in relation to students with language-based educational risk in early childhood classrooms. Her voice begins this collective narrative of teacher stories for two reasons: to emphasize the essential partnership between teachers and classroom-based researchers, and to accord respect to teachers as contributors to processes of teacher education and professional development.

Since the impact of change is better understood when pre-existing features are known, this chapter sets the scene for change in teacher thought and pedagogy. The
chapter is presented in two parts. The first explores teachers’ beliefs. This section highlights the important and practical problem (Hammond, 1996) of understanding the processes teachers use to make decisions about students in early childhood classrooms whose educational risk is language-based. Personal construct theory and social judgement theory are reviewed to explain how teachers’ beliefs and prior experiences shape their practical responses to students at educational risk in early childhood classrooms. Models of school-based teacher development and alternative professional development practices are also acknowledged. Later in this chapter, issues surrounding the teaching of students with language-based educational risk in early childhood classrooms are translated into three specific research questions. These questions are examined in subsequent chapters. Factors contributing to the complexity of teaching and the undertaking of classroom-based qualitative research are teased out. Teachers’ engagement in this research is reported as a structured narrative that explains the research processes and outcomes.

**Teachers’ beliefs**

**Defining complexity in early childhood teaching**

To naïve observers, the apparent simplicity of early childhood classroom language learning and teaching disguises its importance and potential for learning. McCain and Mustard (1999, Opening Letter) begin their *Early Years Study* with an evidence-based view that ‘the period of early childhood development is equal to or, in some cases, greater in importance for the quality of the next generation than the periods children and youth spend in education or post-secondary education’.

In contrast to naïve observers, classroom teachers believe that they “make a difference” (Varghese, 2001, p. 33). Early childhood teachers understand how play-based learning and developmentally appropriate, integrated curriculum can facilitate the learning of each child in their care. A developmentally appropriate integrated curriculum (Isenberg & Jalongo, 1997) is intended to facilitate learning by allowing children to use concrete objects, make choices and interact with peers and adults as they learn. The “integrated curriculum” describes the way that learning areas overlap in early childhood education, rather than being timetabled as separate subject areas.
such as English, Maths or Society and the Environment (Biondo, Raphael & Gavelek, 1999). A developmentally appropriate, integrated curriculum respects that children learn in many ways and that appropriate play based activities provide multiple learning opportunities for the children involved (Isenberg & Jalongo, 1997; Fraser & Gestwicki, 2002; National Association for the Education of Young Children (NAEYC), 1997).

Early childhood teachers attend to each child’s learning style and unique learning strengths and needs. “Learning style”, acknowledges differences between children’s preferred ways of learning. Some children will display different learning styles in spontaneous versus structured learning contexts. Learning style is acknowledged in current literature, particularly in reference to students from diverse cultural and linguistic backgrounds and those at educational risk (Haynes, 1998; Haynes & Shulman, 1998; Lowell, 1995; Lowell, Gurimangu, Nyomba & Yingi, 1996). For uninformed observers, the informality of play-based learning can disguise the commitment of early childhood teachers to the principles of assessment, learning and teaching as documented in the Curriculum Framework (Curriculum Council, 1998).

Various authors have documented the prevalence of children with speech-language-hearing impairments in early childhood classrooms (Alloway & Gilbert, 1998; McMahon, Carrigg, Kelso & O’Neill, 1998; McAleer Hamaguchi, 1995; Naslund & Schneider, 1993). The implications of speech-language-hearing impairments for classroom learning and teaching are extensively referenced (Emmitt, Pollock, & Komesaroff, 2003; Gambrell, Morrow, Neuman & Pressley, 1999; Merritt & Culatta, 1998; Stackhouse & Wells, 1997, 2001; Wallach & Butler, 1994). However, the priority for each early childhood teacher in his/her own classroom is to identify those children who evidence educational risk related to specific speech-language-hearing impairments. Once identified, the teacher’s task, with or without specialist support, is to plan and implement explicit language teaching and learning opportunities to facilitate the development of each ‘at risk’ child.

West Australian teachers are well resourced with reference materials about language development, teaching and learning. The Curriculum Framework (Curriculum Council, 1998) details principles of assessment, teaching and learning for students
from Kindergarten to Year 12, across eight learning areas. *First Steps* materials (Ministry of Education Western Australia, 1991, 1992; Annandale et al., 2004a, 2004b, 2004c) outline language teaching and learning strategies that can be applied across the eight learning areas. Australian teachers have the freedom to work professionally without a prescribed curriculum or test-driven systems (Luke, 2003). Teachers’ professional associations, such as the Australian Literacy Educators’ Association (ALEA) and the Primary English Teachers Association (PETA) encourage ideas and resource sharing between professional colleagues. Yet many teachers describe being overwhelmed, poorly equipped personally and professionally, as well as, under-supported to meet the needs of their students at educational risk related to speech-language-hearing impairment (Bochenek, 1989).

Furthermore, classroom teachers can feel physically and professionally isolated in their classrooms. Hay (2003) reports on the need for a culture of support and learning within schools. She notes, “when teachers are struggling, they don’t feel confident in coming forward for fear of being censured as ineffective, or worse, incompetent” (p. 13). She identifies teachers’ reluctance to offer professional or personal support to colleagues who are struggling in case this action implies blame for failure.

Three other features of classroom reality are acknowledged:

1. Current estimates that between 10% and 30% of students in Australian schools are experiencing literacy and or numeracy difficulties (Rohl & Milton, 2002, p. 31).
2. Estimates of the prevalence of school age speech-language impairment are 5-8% overall, with the percentage reducing as student age increases (Oliver et al., 1999).
3. The limited availability to classroom teachers of personnel with both specific speech-language-hearing expertise and experience planning for early childhood classes (Bochenek, 1989).

The Rohl & Milton (2002) study is a survey of 377 schools from around Australia. Reports of the incidence of students with learning difficulty are given for each of the states and territories. Total percentages specify whether the students are having difficulty with literacy or numeracy learning. ‘Literacy difficulties were perceived to
be somewhat more prevalent than numeracy difficulties’ (p. 30). A mean of 16% of total students with learning difficulties is given (p. 31). The estimate of the prevalence of school age speech-language impairment (Oliver et al., 1999) is given after acknowledging the issues in defining and reporting prevalence figures in childhood language studies.

Early childhood teaching is a deceptively complex task. Fullan (1996) explains how differences between educational systems, schools and teachers have implications for the quality, effectiveness and excellence of teaching. He describes how these differences also impact on student-teacher relations, students’ engagement in learning and learning outcomes. Other issues, such as teachers’ professional confidence and competence, further complicate early childhood teaching. Teachers are well able to make decisions about the language learning opportunities they present, the teaching strategies they employ and the language learning strategies they encourage for whole classes and small groups. However, they are challenged by the need to make explicit decisions about what to change and why, especially when planning language teaching and learning specific to individual students displaying language-based educational risk in their classrooms.

Teachers’ understandings of speech and language impairment have been reported in recent literature. Bishop (1997) notes that most early childhood teachers are better able to identify “speech” impairment than “language” impairment. This is despite the fact that the educational implications of specific language impairment are potentially more significant than that of speech impairment (Leitao, 1998). Roberts, Wallace and Henderson (1997), Lowell (1993) and McAleer Hamaguchi (1995) document the significance of hearing loss, middle ear infection and listening difficulties to classroom outcomes and discuss the issues in identification and management for classroom teachers.

Teachers believe they can make a difference to the lives and learning of individual students in the early years. The early childhood years are generally accepted as being from birth to 8 years of age. In Western Australia, the early childhood school years extend from Kindergarten entry (at 3 ½ years of age) up to and including primary
school Year 3, during which most children turn 8 years of age (Department of Education and Training-DET, 2004).

When children in early childhood classes demonstrate “educational risk” consequent to particular speech-language-hearing needs, teachers must consider implications for learning and teaching. “At educational risk” is a phrase used widely in educational literature. In this study the intended meaning is that the child has diagnosable features of “language-based educational risk.” Such features include diagnoses of impaired speech, language or hearing ability that are potentially detrimental to classroom learning (Aram, 1993; Bashir, Conte & Heerde, 1998; Bishop, 1997; Bryant & Bradley, 1985; Dodd, Campbell & Worrall, 1996; Grimm & Skowronek, 1993; Hastenstab, 1985; Haynes & Shulman, 1998; Kavanagh, 1991; Kuntze, 1998; Lowell, 1993; McAleer Hamaguchi, 1995; Nelson, 1998; Paradise, 1997; Richardson & Di Benedetto, 1991; Roberts, Wallace & Henderson; 1997; Sawyer, 1985; Simon, 1985a, 1985b, 1991a, 1991b; Stackhouse & Wells, 2001; Wallach & Butler, 1994; Westby, 1991). The term language-based educational risk is used frequently in this study. In later chapters, teacher stories clarify how terminology was negotiated and clarified to facilitate common understandings between research participants.

Teachers attempt to identify and respond to the speech-language-hearing characteristics of students at educational risk. They make decisions about the selection and implementation of strategies appropriate to the children’s needs. Teachers are responsible for devising and implementing individual education plans within inclusive classrooms, despite limited access to language specialists. In the context of this study, the following definitions apply:

1. Individual education plans, also known as IEP’s, are a record of planned teaching and learning opportunities to address the strengths and needs of individual students. Review dates and student outcomes are recorded as part of the process of planning further learning and teaching (Wearmouth, Soler & Reid, 2003). Group education plans (or GEPs) serve the same purpose for small groups of children.

2. Inclusive classrooms are those in which individual student needs are addressed within a philosophy of socially constructed learning. Linguistic and
cultural diversity is valued and the strengths and needs of individual students are accommodated in inclusive classrooms.

3. Language specialists include speech pathologists or language support teachers who have specialist training in the diagnosis and planning for children with speech, language, hearing or literacy difficulties. Ideally these specialists are also trained in classroom practice and are available to support teachers’ thinking and practice specific to students at educational risk within classroom contexts. Funding restrictions, the limitations of departmental policies and a nation-wide shortage of trained language specialists have resulted in a shortage of qualified and experienced language specialists working in West Australian early childhood classrooms.

Classroom teachers, language support teachers, teacher assistants, parents, speech pathologists and others working in early childhood classrooms have opportunity to build and review their personal theories about oral and written language development as they plan or participate in classroom tasks. Many experiences shape personal theories. Undergraduate and in-service teacher training, personal study, classroom experience, peer learning, prior experiences, current expectations and prevailing language support policies all play a part. Theories are known too, to be shaped by personal interpretations from cumulative input (Bannister & Fransella, 1974). Teachers’ prior experiences of students with speech-language-hearing impairment also influence their theories. Teachers see a relationship between oral and written language impairment and early childhood classroom learning and teaching. In addition, personal theories impact on individuals’ expectations of early childhood education practice. Hall and Jones (1976) remind us that although individual theories greatly influence teachers’ programs, there is no one “right” viewpoint. Furthermore, teacher skills alone cannot guarantee student outcomes.

I wondered how change in teacher confidence and competence, specific to students with language-based educational risk, could be scaffolded from teachers’ current beliefs and practices. In classrooms, early childhood teachers are immersed in opportunities to compare new language learning and language teaching data against their existing beliefs and practices. Each day, class teachers and language support teachers make decisions about the nature and purpose of classroom activities in early
childhood settings. Theoretically, each activity and learning experience can be scrutinized for the language learning opportunity it presents to children, the response of each language learner to the experience, and the implications for further teaching. This linking of assessment, teaching and learning characterizes productive pedagogy (Annandale et al., 2004a). The multiple demands of early childhood teaching often prevent intentional and systematic matching of teachers’ beliefs to their classroom practice. However, teachers are known to make expert practical judgements and justify these by reflecting on their personal beliefs and values (Tripp, 1993).

The variation in teaching styles, philosophies, classroom organization and explicit teaching within early childhood classrooms, demonstrates the extent to which teachers’ decision-making is connected to their beliefs about optimal language learning conditions and the language learning needs of individual students. Yinger (1990) explains variation in goals, methods and outcomes of teaching practice. He emphasizes the “conversation of practice” determined by the language used by the teacher, the “multi-faceted give-and-take nature of human thought”, and teachers “entering into and living within a context and its participants” (pp. 81-83). Yinger believes it is essential for educational researchers to understand the knowledge and skill of teachers, their interaction with others and their responsiveness to the particularities of their place of teaching, in order to comment on the nature and conditions of healthy, effective teaching.

Promoting changes to effective teaching practice for pre-service and in-service teachers is complicated by the strength of teachers’ disparate personal beliefs, the busyness of early childhood classrooms and the need to acknowledge both. Tripp (1993) claims that professional judgement is always based on theory. He points out that teachers and teacher educators share responsibility for the current skills and knowledge of teachers, the additional skills and knowledge required, and the importance of teachers’ professional judgements and practice for student outcomes. He advocates the joint theorizing of teaching practice by teachers and teacher educators-researchers in classrooms rather than removed from them. So, how might change in teachers’ thoughts, judgements and practices be supported in response to the strengths and needs of students at educational risk?
Tripp’s contention that classroom practice is determined by teachers’ personal beliefs about teaching and learning is supported by interviews with classroom teachers (Bochenek, 1989; Cooksey, 1996). Although unable to find credible research explaining teachers’ responses to opportunities for change in theory and classroom practice; observation, dialogue and co-teaching with early childhood teachers supported my perceptions about their perceived need for change.

Teachers recognize when their personal beliefs and prior experiences do not equip them to confidently respond to the strengths and needs of students at language-based educational risk in their classes. Potentially, data could determine factors influencing teachers to reflect on or update their personal theories of language learning and early childhood classroom language teaching. Based on the work of Csikszentmihalyi, 1997, Bennett and Rolheiser (2001) discuss fundamental knowledge, time to be creative, working in an environment that values innovation, having access to others and having an interest in incremental knowledge, as factors that encourage teachers’ creativity to develop. Recognizing the “need” for change in thought and pedagogy is a characteristic of creative and effective teaching. Bennett and Rolheiser (2001) highlight the importance of teachers “having the interest to continue pursuing knowledge in the field” (p. 10).

Hence, in the planning stages of this research the general statement, Teachers’ beliefs determine their classroom practice, provoked a series of more specific questions:

1. To what extent do teachers’ beliefs about language-based educational risk determine their practical response to students at risk?
2. To what extent can teacher beliefs and classroom practice be shaped? How?
3. What are the implications of developing, with early childhood teachers in their classrooms, the theory and practice of teaching students with language-based educational risk?

The issue of how to work with teachers to support their teaching of students with language-based educational risk in early childhood classrooms presented an important, practical and real research challenge. Empirical data were required to specify teachers’ personal theories about early childhood teaching, their insights into processes of classroom decision-making and their interpretations of links between
teaching and student learning outcomes. I needed to ascertain whether or not individual teachers believed they could make a difference for students at educational risk (or language-based educational risk) in early childhood classrooms.

Existing literature acknowledged the importance of teachers’ awareness of their concerns. Hall and Jones’ (1976) referred to earlier studies by Frances Fuller, using the Johari window, to present their ideas on Competency-Based Teacher Development. Hargreaves and Fullan (1992) specified the importance of knowledge and skill development, self-understanding and contextual (or “ecological”) change to teacher development. The Concerns-Based Adoption Model (CBAM) (Loucks-Horsley, 1996; Pike Hall, 2003) and peer coaching (McDowall State School, 2002) are recommended as effective methods for furthering teacher development. Professional development outside of schools also recommended the use of peer coaching (Ladyshewsky, 2004) and reciprocal peer coaching (Ladyshewsky & Ryan, 2002). Each of these researchers attended to processes and content of professional development. Rather than pre-select any one of these methods to use with teachers, I intended to learn about teacher preferences for the content and processes of their professional development.

Prior to data collection and collation I reviewed relevant psychological theory. My intent was to better understand theories of decision-making as a basis for analysing and interpreting teachers’ decision-making processes. Decision-making theory suggested that teachers’ beliefs could be developed and linked to classroom practice. There was a need for data to demonstrate the change-potential and durability of teachers’ personal theories and pedagogies. Personal construct theory and social judgement theory informed my particular interest in relationships between individuals’ personal theories and their practical responses to challenging classroom situations.

Personal construct theory explains how individuals develop their thinking and the importance of cognitive and emotional factors for effecting change in these theories. Social judgement theory explains how ego-involvement and social interactions can influence or predict one’s actions. My task was to interpret personal construct and social judgement theories alongside the negotiation of classroom practice with
teachers. The intended outcome was to use decision-making theory and empirical data to learn how I could better support teachers to change their thinking and classroom practice for students at educational risk. Personal construct theory and social judgement theory provided a framework from which I could interpret teachers’ engagement (or lack of engagement) in change processes.

**Personal construct theory**

Personal Construct Theory was first presented by George Kelly in the 1950s and revisited by later researchers such as Bannister and Fransella (1974), Pope and Keen (1981), Diamond (1995) and Bevan (1995). Personal construct theory provides a theoretical basis for the influences and processes of personal theory formation. Bannister and Fransella (1974) offer detailed explanations of links between emotional and cognitive states as a way of understanding factors that predicate change or “transformations” in the personal constructs of individuals. Personal constructs are summarized as idiosyncratic terms of reference to which one refers consciously when making deliberate decisions, or unconsciously when improvising (Yinger, 1990). Personal construct theory can be applied to interpretations of relationships between teachers’ prior beliefs, theories, experiences and practices and their routine pedagogy or expert practical decisions.

Although personal construct theory impacted primarily on psychotherapy and education in the early years, it is currently used more in management and disciplines other than education (http://www.repgrid.com/pcp). Beven (1995) pointed out the potential of personal construct theory in a wide range of clinical and educational settings. Researchers such as Pope and Keen (1981) and Diamond (1991) specifically applied Kellyan theory to teacher decision-making. Pope and Keen apply personal construct theory to education as “a joint venture between the teacher and the learner” (p. 28). Diamond uses personal construct theory to discuss why some teachers are unable to elaborate their personal theories. He contrasts the influence of prior beliefs, experiences, theories and practices with contrary needs in current school contexts to explain why some teachers may adhere to previous, less appropriate pedagogy in new situations.
In current educational literature, the principle of finding common ground from which to facilitate pedagogical change with teachers, echoes personal construct theory. For example, Clark (1992) discusses the consequences of teachers’ implicit theories and beliefs. He advocates teachers’ self-directed professional development as beginning with the recognition of their individual beliefs, strengths and perceived needs. Thiessen (1992) believes that teachers need to identify meaningful connections to their personal views of teaching and learning prior to engaging in Classroom-Based Teacher Development (CBTD).

Personal construct theory is used in this study like a hypothetical master plan against which to analyse and interpret teacher beliefs and theories. Three aspects of personal construct theory contribute to the theoretical base for this research. The first comes from Fiest’s basic corollaries of personal construct theory (http://www.wynja.com/personality/pctf.html). Fiest uses Kellyian principles to explain that “not all new experiences lead to a revision of personal constructs”, some are “subject to change by experience” but others “resist modification regardless of experience.” He calls this the Modulation Corollary. Other corollaries of interest to working with teachers in classrooms are the Commonality Corollary and the Sociality Corollary. The former suggests that when the experiences of two people are similar, their personal constructs tend to be similar. The latter corollary explains that we are able to communicate better with people whose constructions we share or understand.

The second aspect of personal construct theory informing this research is Beven’s (1995) use of Kellyian principles to encourage tolerance of ideas and values. Beven uses examples to explain a fundamental premise of personal construct theory: We all construct our own worldview of events. The individuality corollary acknowledges, “people have different experiences and therefore construe events in different ways” (http://www.wyna.com/personality/pctf.html). Our worldview is made explicit when we share concepts and views. Shared planning by teaching peers requires that teachers share their constructs of teaching, learning and the students in question, and are explicit about their ideas for classroom practice. Without such sharing teaching peers cannot assume a common philosophy of teaching and learning.
The third important aspect of Kellyian thinking is the emphasis on personal constructs as determinants of how people use past events to cope with future ones. People are “driven by the need to cope with coming events” and they do so by using their prior experiences and resulting constructs to make sense of the future as they meet it (http://www.repgrid.com.pcp/). Teachers constantly need to cope with new and different teaching challenges. In doing so, they spontaneously or intentionally search prior experiences for familiar constructs with which to greet or resist new challenges, understand them and communicate them to others.

Personal construct theory is used in the current study within early childhood classroom contexts to make sense of teachers’ responses to classroom specifics. The principles can be used to support teachers and researchers to build shared worldviews of teaching and learning. Personal construct theory provides the basis through which I approached teacher change as a teacher-researcher. For example, since personal construct theory offers insights into teachers’ current thoughts, beliefs and practices I used it as a grounding philosophy for preparing teacher interviews. The purpose of initial interviews was to understand teachers’ individual worldviews and encourage the establishment of effective working relationships with all teacher participants. Furthermore, personal construct theory can explain teachers’ recognition of occasions when their existing beliefs, theories, practices and experiences do not equip them to cope with new teaching challenges. My intention in this research was not to replace teachers’ constructs with my own but to work from an exchange of constructs to some common ground for shared teaching (with a focus to students at risk).

Teachers frequently need to make decisions about students’ language development with associated professionals such as speech pathologists and educational psychologists (Bashir et al., 1998; Merritt & Culatta, 1998). While the aim of such professional collaboration is to establish individual language learning plans or negotiate learning opportunities for children with identified language-based educational risk, decision-making between professionals is influenced by individuals’ personal constructs of school policy, student strengths and needs, and early childhood pedagogy. Teachers required to identify children at educational risk or recommend students to available language support programs, may not be given
criteria to use in making these decisions. In contrast the teacher with prior experience of children identified with language-based educational risk and classroom-based language support programs can access decision-making criteria from prior judgements. Professionals such as co-teachers, or teachers and speech pathologists, making joint decisions about students’ language development are likely to be influenced by implicit (or explicit) personal constructs of the shared task. Perhaps pre-existing personal constructs and decision-making criteria are not compatible with those used by collaborating colleagues, or constructs and criteria are inappropriate to the new situation.

Examples of teachers’ language learning decisions suggest how personal constructs influence teacher decision-making. Classroom-based language support programs include a variety of ways of managing the language learning and teaching needs of individual children without removing them from the classroom. Some educators believe that improved classroom teaching ratios by the presence of additional staff (not necessarily additional teachers), changes to the classroom program by specialist staff in consultation with the classroom teacher, and the allocation of language support resources (such as CD Rom spelling programs to supplement whole class practice), improve student learning outcomes. Recommendations to include particular children in language support programs or the inclusion of augmentative communication practices (such as signing) in a classroom program are often contentious. Conflicting recommendations and competition for limited language support resources prompt debate about the rationale for teachers’ decision-making. One possible outcome of contentious decision-making is that personal constructs are made explicit during the process of negotiating and reflecting on recommendations. Ideally, classroom teachers working with parents, colleagues, administrators or other professionals make their personal constructs explicit prior to the process of language development decision-making.

When criteria are specified to assist decision-making, teachers can choose to integrate these with their pre-existing constructs (Wigton, 1996). The allocation of developmental phases to reading, writing, spelling and oral language by classroom teachers for individual students, as with First Steps resources (Ministry of Education, 1992d, 1992f, 1992g, 1992m; Annandale et al., 2004b), is one such example. In First
Steps, teachers use “key indicators” along language continua to match their observations and records of individual children to developmental phases in oral language, reading, writing and spelling. First Steps resources (Ministry of Education WA 1991-2; Annandale et al., 2004b, 2004c) detail the assessment and monitoring of language development, language teaching strategies and language learning opportunities as recommended and used in West Australian schools. However, discrepancies exist between and among teachers when plotting developmental language phases for individual children. First Steps provides a system for matching a developmental view of oral and written language development to classroom observations. Teachers who share this mapping process may also negotiate language constructs and classroom language plans.

Personal construct theory cannot address all questions about early childhood teacher decision-making for students at educational risk. At times determining how to support change in teachers’ thinking and practice is difficult unless one understands both current constructs and how these developed from prior experiences. Nonetheless, the theory can be used to explain teachers’ response to change and contribute a rationale for supporting change in thought and pedagogy.

When planning to research how teacher-researcher dyads move from sharing personal constructs of early childhood language development to effectively co-planning the language learning and teaching of students with complex needs in a range of early childhood classes, I considered other accounts of teachers’ response to change (Bennett, 2003; Bennett & Rolheiser, 2001). Social judgement theory provided further insight into factors influencing change in teacher thought and pedagogy.

Social judgement theory

Social judgement theory suggests that recognition of affinity between an individual’s current personal constructs and those tacitly perceived in the suggestions of others increases the likelihood of the suggestion being accepted. Runner (1999) describes the connection as “the importance an issue holds in your life.” Krebs (1999) identifies the importance of ego-involvement in decision-making, especially for
issues of personal significance. When one is strongly committed to an issue s/he is more likely to respond to opinions of others on the same issue. Extreme responses are less likely when issues are not personally significant. Social judgement theory has been applied to decision-making in many professional fields (Carner, 2001; Curtis, 2001; Orban, 2001; Runner, 1999), including education (Cooksey, 1996).

Social judgement theory accounts for factors influencing individuals’ responses to opportunities for change. It acknowledges that individuals may or may not be aware of factors that operate as persuasive or dissuasive influences in their decision-making. Since personal experiences, beliefs and practices contribute to each teacher’s personal constructs of educational risk I hypothesized that teachers’ responses to alternative thinking and practice about students with complex language needs could be predicted. Teachers who considered learning to be strongly language-based would be more likely to accept increased attention to language teaching and learning strategies. Teachers committed to the assessment, planning and monitoring of students with complex language needs would be more likely to embrace opportunities to enhance their thinking and practice than teachers who considered that such children should be managed by specialist staff or in withdrawal groups.

According to social judgement theory, “important” personal constructs influence individuals’ responses to proposed language recommendations. Appropriate language recommendations will be discounted when the particular language issue is deemed not to be important. This is a simple and useful application of social judgement theory. Indeed, Social Judgement Theory can be very useful as a theory to expand “the listener’s own ideas on a subject that they believe already” (http://oak.cats.ohiou.edu/~dt225196/sj.htm). Thus, social judgement theory may be usefully woven into the development of collaborative language plans. It could assist analysis of factors influencing teachers’ support for, rejection of, or neutral response to opportunities for change in thinking and pedagogy.

Exploring teachers’ acceptance, rejection or non-commitment (Orban, 1999) of recommended language development ideas could do more than inform researchers’ understandings of teachers’ personal constructs specific to language-based educational risk. According to social judgement theory, an exploration of teachers’
responses to explicit language development practices could provide insight into the importance of such issues for the teachers and their ego-involvement. These insights might be used to predict individual teachers’ future responses. Furthermore, patterns of teacher responses to suggested change could be used to plan and improve change processes. This idea is acknowledged earlier work by Frances Fuller and Gene Hall (Hall & Jones, 1976). Frances Fuller proposed an ordered sequence of concerns about self, teaching and students’ learning as teachers moved from pre-service to in-service teaching. In the 1970s, Hall, Wallace and Dossett used the Concerns-Based Adoption Model (CBAM) to examine links between the concerns of individual teachers and their responses to education innovation.

In effective collaborative language planning “each person’s particular skill and knowledge are respected and valued” (Cerebral Palsy Association Western Australia-CPAWA, 1999, p. 20). Yet times exist when collaborative teams discard individual contributions to decision-making. Early childhood classroom planning for children with complex language needs often requires the combined expertise of teachers, teacher assistants, speech pathologists and others. For example, a speech pathologist or visiting teacher may recommend the use of cued articulation (Passey, 1990a, 1990b) for one child. Cued articulation (Passey, 1990a, 1990b) is a system of hand gestures used to simplify and help teach “the organization and pronunciation of spoken English” (p. 2). The classroom teacher considers when and how cued articulation might supplement her current language program. Social judgement theory might explain the teacher’s decision to use or not use cued articulation in the classroom. Principles of social judgement theory may assist specialist support staff to build links between teachers’ existing constructs and proposed changes.

In collaborative teams “each person is comfortable to share her (sic) knowledge” (CPAWA, 1999, p. 20). The development of “effective and implementable procedures is best assured through the active cooperation and collaboration of individuals who possess a range of information and perspectives” (Bricker & Cripe, 1992 in CPAWA, 1999, p. 18). Cairney and Munsie (1992), Bashir et al. (1998) and DiMeo, Merritt & Culatta (1998) recommend similar skills for effective collaborators. Reilly (1996) suggests that the reciprocal sharing of points of reference
(called “self-insight” and “other insight”) can facilitate a greater awareness of the value and possible relevance of these alternative points of reference.

Social judgement theory alone cannot explain the processes and outcomes of language development decision-making by teachers, for students at educational risk, in early childhood education. Yet, together with personal construct theory, social judgement theory might explain why individual early childhood teachers select particular language development practices and opportunities for change, over others. Together these theories provide insight into factors that encourage or discourage teachers’ responses to change in thinking and pedagogy.

Theoretically the reciprocal sharing of teacher and teacher-researcher personal constructs (Reilly, 1996; Mumpower & Stewart, 1996) specific to classroom language development practices, should encourage further negotiation of explicit language development practices. Such was the theoretical basis for investigating this important and practical problem (Hammond, 1996).

Early childhood teachers need to make specific decisions about the language learning opportunities they present, the teaching strategies they employ and the language learning strategies they encourage in students. In the current study I worked with ten early childhood teachers and their students with language-based educational risk, in early childhood classrooms. I intended to examine factors influencing change in teacher-researcher learning processes in that context. Although we implemented specific language development strategies, the focus of this research was on how and why teachers influenced the co-construction of our classroom teaching, rather than on the particular teaching practices used.

**Naturalistic generalization**

Naturalistic generalization is a way of thinking about the learning potential of teachers in classrooms. Bassey (1999) describes naturalistic generalization as “the learning processes through which we individually acquire concepts and information and steadily generalize them to other situations as we learn more” (pp. 33-34). This notion of individuals’ engagement with learning processes is important when
considering how and why early childhood teachers can be supported to develop their thinking and pedagogy in response to students at educational risk. Bassey’s (1999) recognition of individuals’ ability to generalize learning across contexts has implications for the durability of change in thinking and pedagogy. I wondered whether changes in teachers’ thinking could be facilitated through the negotiation of classroom language development practices, or whether changes in teachers’ thinking needed to precede their acceptance of new practices, planned collaboratively.

Flyvberg (2001) argues, “context and judgement are irreducibly central to understanding human action” (p. 4). He explores links between knowledge and context to explain that increments in learning from novice to expert can be analysed in terms of problem solving processes. Flyberg refers to five levels in the “Dreyfus Model” of learning processes: novice, advanced beginner, competent performer, proficient performer and expert. Novices, for example, attend to facts, characteristics and rules, independent of context demands. Competent performers prioritise tasks and learn from themselves and others. They deliberately plan their actions and begin to interpret and make judgements within the context of action as they “think on their feet”. By contrast, experts in a given field “operate from a mature, holistic, well-tried understanding, intuitively and without conscious deliberation” (Flyvberg, 2001, p. 18). This model of learning processes forms a basis for Flyvberg’s argument, “Context is central to understanding what social science is and can be” (p. 9).

Indeed, Flyvberg believes that social science matters when it is based on context, judgement and practical knowledge. I wondered about the extent to which teachers (and I) would generalize our learning to situations beyond the study classrooms. Given that the teachers in this study had some prior experiences of collaborative decision-making, I wondered how those experiences might influence their response to our teacher-researcher negotiations. Collaborative processes were reviewed prior to data collection for this study.

**Collaborative decisions and teacher judgements**

It is unlikely that even the most collaborative decision-makers hold identical beliefs and practices. Indeed the diversity of personal theories, interpretations, experiences
and expectations add to the benefits of collaborative planning in classrooms for both teachers and students (DiMeo et al., 1998; Southworth & Lincoln, 2000). In schools, recognition of disparate individual points of reference can prompt discussion and the documentation of criteria for future decision-making. For example, the proposed development of language support policies and the discussion of clear eligibility criteria for children attending Education Support Units (Kerimofski, personal communication, November 12, 2003) requires criteria setting to assist teacher decision-making. Education Support Units (ESUs) are separately funded educational centers for children with special learning needs who meet set criteria for inclusion. Intelligence quotient scores and descriptions of physical disability and adaptive behaviours are amongst the criteria used to define eligibility for placement in West Australian Education Support Centres (ESCs) or ESUs.

Tripp (1993) researched teacher decision-making in terms of what teachers already do and what else they might be trained to do. He identified four kinds of judgement necessary to professional teaching: practical judgement, diagnostic judgement, reflective judgement and critical judgement. He concludes that most teachers rely on practical judgements to make instant decisions about pedagogy. Teachers use reflective judgements to justify decisions made. Tripp (1993) states that although most teachers make practical judgements expertly, “they are generally not able to make either diagnostic or critical judgements” (p. 140). More than a decade ago Tripp acknowledged the need for further research into teacher judgement.

My particular interest was in supporting teachers to develop from being practical and reflective, to becoming diagnostic and critical decision-makers about students with language-based educational risk. In early childhood classrooms teachers must select and implement pedagogy appropriate to the needs of students, especially those whose language development may contribute to learning difficulty. Language planning, particularly for children at educational risk, is based on detailed diagnostic judgements and the critical matching of students’ language profiles to language learning and teaching strategies. Tripp (1993) advocates analysis of critical incidents in teaching and learning to enhance both skills and knowledge in teachers and educational researchers. What would be needed to facilitate development of
diagnostic and critical judgements? How could teachers be supported to become more diagnostic and critical in their decision-making?

Personal construct theory explained the idiosyncratic way in which theories, together with experiences and beliefs over time, shape teachers’ future practice. Other works (Bashir et al., 1998; Campagne-Wildash, 1995-6; DiMeo et al., 1998; Mumpower & Stewart, 1996; Reilly, 1996; Southworth & Lincoln, 2000; Tripp, 1993) challenged the oversimplification of teachers’ actions as outcomes of personal theories. The underlying premise that teachers plan, select and implement classroom language development strategies for children with complex needs arises from the teaching-learning-assessment cycle promoted in the Western Australian Curriculum Framework (Curriculum Council, 1998). My alternative worldview was that teachers could be supported to develop diagnostic and critical judgement skills if this learning occurred in their classroom contexts. The outcome would be effective classroom management of children with language-based educational risk (rather than the withdrawal of children from classrooms for clinical language therapy).

I needed to better understand processes of change in teacher thinking and pedagogy, specific to early childhood students with language-based educational risk. In planning this research I reflected on whether teachers’ prior experiences of collaborative planning with visiting language specialists had effected sustained change in teachers’ thinking and practice. I wondered about the overlap and relative merit of collaborative, consultative and instructional forms of teacher support. I planned to interpret personal construct theory and social judgement theory as I examined the content and processes of teacher development. Each of these factors could contribute to the further investigation of influential factors changing teachers’ thinking and classroom practice.

A context for research

Having reflected on a theory base for teacher decision-making in classrooms, the proposed research needed to be defined with researchable questions. To shape research questions, I considered current processes and opportunities for working with students at risk in early childhood classrooms. My day-to-day work with teachers and
their students in early childhood classrooms gave me the opportunity to plan to meet the needs of students at educational risk. Simultaneously I could examine the role of teachers’ personal constructs (as well as, my own) in decision-making processes.

At the time of this study, the role of language specialists Western Australian schools to date, was to direct early childhood teachers to new language development practices; recommend changes in classroom contexts, and guide teachers to new thinking via professional development. The professional roles of consulting speech pathologists, school-based educational researchers and language support teachers were described as “collaborative”. My contention was (and is), that many language specialists “inform” rather than learn with teachers.

A central problem in this study was that teachers frequently requested or needed planning support to meet the language development needs of students at educational risk. Teachers’ problems in planning and implementing language development programs for such students in early childhood classrooms impacted upon language support specialist staff and teacher educators. Language specialists and teacher educators needed to determine ways to support teachers so that classroom language planning was a reciprocal negotiated learning task, originating from a mutual understanding of individuals’ worldviews.

It follows that teachers, language support staff and teacher educators all need to change their thinking and pedagogy so language development planning is jointly constructed rather than imposed by one professional upon another. This study was designed to investigate the benefits of jointly constructed change whereby classroom teachers and language specialists were active partners in negotiated classroom practice. My own challenge was: How can I, as a teacher-researcher, learn to facilitate change in the teachers’ thinking and pedagogy and be open to change myself?

While engaged in the early childhood teaching of children with language-based educational risk, I reflected on how teachers developed their language assessment and planning concepts and processes. To what extent did this occur? To what extent could I, as a participant-researcher in this setting, develop my own concepts and
processes to facilitate teacher change? If changes were evident in this group of early childhood teachers, what implications might there be for teacher and researcher development?

Here I sought to learn processes of shared decision-making to encourage change in early childhood teachers’ thinking and pedagogy with specific reference to students at educational risk. Data were needed to inform two issues:

1. How and why do teachers decide to use (or not use) language development practices suggested, recommended or modeled for them?
2. How might teachers’ personal constructs be used, together with principles of social judgement theory, to support teachers’ decision-making about language development in classrooms?

So, in this study I set three research questions (below) and worked with ten teachers to investigate professional decision-making in eight early childhood classrooms in a single school. Daily experiences of language learning and language teaching negotiated from the respective worldviews of the early childhood classroom teachers and myself, as teacher-researcher, were translated to research data. I planned to collect data using an action research methodology and report findings against the principles of educational research as recommended by Bassey (1999). Data were interpreted as changes in both teacher and researcher understandings during one school year. As the study progressed, I recognized the importance of teacher voice in this action research and chose to report research findings using structured narrative. The reasons for refinement of the research process and distinctions between the action research project and the reporting of action research outcomes (Perry, 1995) are addressed in the next chapter.

The second part of this chapter focuses on the refining of the three research questions. As is the tradition within qualitative research, the problem is located within the intricate “real world” of early childhood classrooms (Hammond, 1996). Research questions are prefaced with the discussion of planned change and teacher decision-making.
Planning change in early childhood classrooms

Given the variety of speech-language-hearing impairments represented in mainstream early childhood classrooms, the explicit planning and implementation of language development strategies for individual students at educational risk is a complex task. In this study it was essential to recognize both teachers’ personal constructs about the strengths and needs of individual students and the particularities of the classrooms. I anticipated two outcomes of negotiated change:

1. Appropriate language development practices for children at risk.
2. Teacher and researcher learning about the content and processes of change.

In the current study “planned change” focused on reciprocal learning about how and why teachers and I (as a teacher-researcher) could work together to effect improved outcomes for our students. Acknowledging personal constructs and social judgement theory, I planned to share understandings, experiences and classroom teaching with teacher participants in one school. I anticipated that we would develop ways of sharing and interpreting our worldviews to gain reciprocal insights into our personal constructs of language-based educational risk, language teaching and early childhood pedagogy. Next, we would negotiate and plan changes to language teaching and learning opportunities, and classroom strategies for students at risk. Together, classroom teachers and I would implement and review shared pedagogy.

Educational change is well documented in recent literature. For example, Joyce & Showers (1988) examined peer coaching as a way to develop shared language, common understandings and to expand teaching repertoires. Southworth and Lincoln, (1999) include general conditions for Improving the Quality of Education for All. Ainscow (1998) emphasizes the inclusion of the needs of all learners in educational planning. Fullan and Hargreaves (1996) discuss the place of collegial and individual processes of educational change within schools. Anderson and Biddle (1991) address issues in research-based school change. Oliver’s (1995-6) edition of Australian case histories of teachers embracing change, highlights the impact of outcomes-focused education on classroom teachers.
Studies specific to the constructs and processes used by the teachers planning change in classroom language development practices, for students at educational risk, were not located. Given that speech-language and hearing impairment are major contributors to educational risk in early childhood classrooms, I sought to specifically understand the personal constructs that participant teachers held of speech-language-hearing impairment, and of educational risk. I wondered about the change potential of these constructs and factors encouraging teachers’ engagement in change processes. I sought to report teachers’ and a teacher-researcher perspective.

**Researching teachers’ decision-making**

This study began with an emphasis on teacher decision-making when teachers are required to identify children with language support needs and subsequently plan classroom language support programs for them. Since this study was designed to facilitate reciprocal learning, participant teacher learning and participant researcher learning are of equal importance. I intended to inquire about the extent to which teachers’ personal constructs of speech-language-hearing and learning impairment (or language-based educational risk) could be shaped. I also planned to examine the influence of specialist language data on teachers’ identification of students at educational risk and their subsequent classroom language planning.

How do teachers respond to specialist language data? Examples of teachers’ responses to detailed language data, gained from specialist observation and transcripts (Bochenek, 1989) suggest that classroom teachers value diagnostic data when links to classroom teaching and learning are made clear. Social judgement theory places specialist information in the context of data teachers recognize as significant to their teaching role (Krebs, 1999). Classroom teachers choose to accept, remain neutral or reject assessment information provided by language specialists for classroom language planning. Standard language assessment results can be deemed unimportant or insignificant if the links to classroom teaching and learning opportunities are disguised by jargon. When the implications of language diagnoses are not connected to classroom contexts, associated recommendations can be perceived as impractical or antithetical to teacher beliefs and practices. One of my
intentions in this research was to explore teachers’ responses to a range of language assessment data and specialist recommendations, for the children they taught.

A personal construct, arising from my prior experiences working as a teacher-language specialist in primary classrooms, is that teachers value language development data gathered from, interpreted within and used for planning within their classrooms. Apparently, teachers’ familiarity with the context and processes of data collection adds value to recommendations arising from these data. I used this construct like a research hypothesis, to direct research planning. I asked, for example, to what extent are clinical language data - recommendations for classroom language development practices overlooked or ignored by teachers? And, conversely, to what extent are classroom-based language data - principles of teaching, learning and assessment overlooked by language specialists?

Theoretically, conflict in collaborative classroom language development planning can result from unrecognized dissonance between individuals’ personal constructs of the issues and contexts of need (Cooksey, 1996; Doherty & Kurz, 1996; Mumpower & Stewart, 1996). The strong, shared theoretical base is not sufficient to ensure that teachers and language specialists jointly construct changes in thinking and pedagogy. Indeed, the relative merits of collaborative, consultative and co-constructed processes for supporting teachers through change in pedagogy have not been researched. Investigations into factors influential in the co-construction of classroom language development plans were required. This study was a response to these needs.

**Research questions**

The research focus on teacher and researcher learning, specific to facilitating changes in thinking and pedagogy, prompted three research questions. Each question is specific to the needs of children at educational risk in early childhood classrooms.
Research question 1: Teachers’ personal constructs

Research question one asked: *To what extent do teachers’ personal constructs of language-based educational risk determine their pedagogy for students at risk?* This question probed the breadth and depth of teachers’ current understanding. I sought to understand how early childhood teachers define educational risk; identify children with language-based educational risk in their classrooms; select children for available language support services; chose language development practices for their whole class, small groups and children at educational risk; and plan language development practices to address the needs of children at educational risk in their classrooms.

Consequently the research design needed to include the collection, analysis and interpretation of teachers’ personal constructs specific to this domain. A method sensitive to the complexities of early childhood classrooms and the personal constructs of individual teachers was required. In addition I needed a way to track connections and anomalies between teachers’ personal constructs and their specific pedagogy, as well as to validate my interpretations as a participant researcher with those of the teachers.

Research question 2: Factors shaping thought and pedagogy

Personal construct theory and social judgement theory provided a framework from which to examine and explore teacher decision-making and changes in teacher decision-making. As acknowledged earlier in this chapter, these theories offered limited explanations of the extent, potential and implications of facilitating change in thought and pedagogy. Hence, question two broadened this focus. Question two asked: *Which influential factors shape early childhood teachers’ thoughts and pedagogy for students at educational risk?*

Among other factors, question two probed the extent to which teachers’ thought and pedagogy were influenced by available oral and written language assessment data for students at risk, by particular language resources, by specialist service providers and/or by co-constructing classroom language development plans. This study was an
opportunity for ten teachers and myself to share or divide teaching tasks in our time together. The sharing of classroom tasks defined our research context and provided on-going opportunities for teachers to accept, ignore or reject my assistance in classroom language planning. Co-construction developed from this beginning.

Research question two led to more detailed analyses as the teachers and I identified factors influencing teachers’ decision-making. The use of action research cycles for data collection helped to “define what the researcher should do” (Bassey, 1999, p. 68) at each subsequent stage of the study. Throughout this study, teachers retained the right to choose whether or not to continue their involvement, to negotiate their roles, to put priority to the educational outcomes of their students, and to participate in research reviews and triangulation processes. (These aspects of the research process are outlined in Chapter 3 and detailed in the structured narrative of chapters four through six.)

**Research question 3: The implications of co-construction**

Personal construct theory, social judgement theory, critical incident method (Tripp, 1993), naturalistic generalization (Bassey, 1999) and current practices of professional development for teachers, grounded this study. Each perspective on changing teacher thinking could influence the qualitative interpretation of data. In turn, my interpretation of data directed the development of co-construction as an alternative way to support change in teacher thought and classroom practice.

Question three asked: *What are the implications of the co-construction of classroom language development plans for effecting transitions in teacher thought and pedagogy?* This question is important for debating, negotiating and understanding future teaching and learning. As co-construction was developed and explored, links between research questions, data, analytical statements, generalizations and conclusions contributed to the implications of this research.

This research focuses on co-constructed processes. This focus attuned research participants to the nuances of language content and alternative processes for negotiating and developing classroom language development plans. Teacher
educators need to reflect upon factors influencing teacher decision-making, as well as, processes for classroom-based research. I intended to research influences shaping thought and pedagogy, from the teacher’s point of view. The possibility that research into the co-construction of language development plans could be used to “develop theory” and “enhance educational policy” (Bassey, 1999, p. xi) prompted further refinement of research questions and processes during the data collection year.

**Summary**

Teachers’ prior theories, beliefs, practices and experiences may not adequately prepare them to meet the needs of students at educational risk in their early childhood classrooms. However, teachers’ personal theories, decision-making and classroom practice can be understood through reflection on shared classroom experiences and by individuals exchanging stories. In later chapters, teacher stories reveal how shared teaching practice was negotiated and co-constructed, and how and why teachers in early childhood classrooms came to change their thinking and practice with students at educational risk.

The next chapter examines the suitability of action research for the conducting of this classroom-based research and my choice of structured narrative for reporting research outcomes. The potential of teachers as co-researchers is also addressed. Discussion focuses on reciprocal teacher and researcher learning in classroom contexts as both possible and necessary.

1 In accordance with the consent form signed by all teacher participants, pseudonyms are used for all teachers and students in this study.
Chapter 2

Early childhood classrooms: Contexts for qualitative research

‘Learning is a case of going from the known to the unknown. What one knows, and how one knows affect what one can learn.’


Introduction

In this chapter, I consider the potential of teachers as co-researchers in early childhood classrooms. I explain action research as my method of choice for this study and clarify my use of structured narrative to report teachers’ engagement in this action research. The action research method confirms my commitment to developing teachers as active participants in qualitative, socially constructed, classroom research. Our shared task was to develop processes for planning and teaching together. Our belief was that appropriate, explicit teaching would enhance learning outcomes for early childhood students.

I begin with some discussion of the advantages of qualitative research methods within early childhood classrooms. In Chapter 1, I acknowledged that responsive teachers in early childhood classrooms display considerable diversity in their interactions with students, especially those at educational risk. Here, I argue that action research methods capture the particular planned change, actions, observations and reflections (Wadsworth, 1997) of teacher-researcher pairs. Action research accommodates teachers’ individual responses to students and encourages the refinement of research questions and processes, within the complexity of early childhood classrooms.

Holliday (2002) acknowledges, “no matter how extensive the research, different researchers will always pursue and see very different things in the same setting” (p.
The critical point is that the research methodology chosen determines the outcomes of the study. Cooperrider & Srivastva (2001a) state that social science should be action-oriented and problem focused. “Through our assumptions and choice of method we largely create the world we later discover” (p. 1). One intended outcome of this research is an understanding of “the mental processes underlying a teacher’s recognition of a situation,” (Batten & Marland, 1993, p. 69).

In this chapter, an overview of qualitative research methods, particularly participant action research, is applied to the planning and implementation of language development practices for students at educational risk. I outline the appropriateness of action research as a way to track changes in teacher participants’ decision-making for students at educational risk, to develop teacher-researcher partnerships and to include the teacher-as-researcher voice. I explain the idea of using teacher stories to report data collated and analysed in response to the three research questions (outlined in Chapter 1).

Structured teacher narratives are presented as a useful and informative way to describe factors influencing change in teachers’ thinking and practice. Specifically, I need to report:

(a) The extent to which teachers’ personal constructs of language-based educational risk determine their pedagogy for students at risk,
(b) influential factors shaping teachers’ thoughts and pedagogy for students at educational risk, and
(c) the implications of the co-construction of classroom language development plans for effecting transitions in teacher thought and pedagogy.

My conviction is that participatory action research, reported through structured narratives, allows researchers to interpret and verify the depth and detail of qualitative data contained in individual teachers’ stories. This examination of early childhood classrooms as contexts for qualitative research sets the scene for the interpretation of teachers’ narratives in later chapters.
Silverman (2000) details the advantages and disadvantages of qualitative versus quantitative method in educational and other research. He argues that “the whole ‘qualitative / quantitative’ dichotomy is open to question” since “objectivity should be the common aim of all social science” (p. 11). Silverman reviews earlier critiques of research methods to compare and contrast distinguishing features of qualitative and quantitative method. He provides examples of description enriching qualitative data interpretation and statistical data clarifying qualitative research. He recommends that researchers “make pragmatic choices between research methodologies according to the research problem,” choosing a level of data precision appropriate to their task (p. 12).

The need to better understand teachers’ processing and recognition of their actions in response to problems was identified in the late 1980s by Batten and Marland (1993). Contemporary research literature confirms the advantages of qualitative inquiry when actions and problems need to be understood and interpreted in defined contexts (Bassey, 1999; Cooperrider & Srivastva, 2001a, 2001b; Hammersley, 1993a, 1993b, 1993c; Holliday, 2002; Silverman, 2000; Stake, 1995; Wadsworth, 1997; Wellington, 2000). Many authors have examined issues of qualitative inquiry specific to educational contexts (Alrichter, 1993; Bassey, 1999; Eisenhart & Howe, 1992; Eisner & Peshkin, 1990; Hammersley, 1993b; Jackson 1990; Kincheloe, 1991; Pitman & Maxwell, 1992; Schratz, 1993a; Wellington, 2000).

Teachers’ accounts of their regular classroom decision-making provide “multiple constructed realities” for interpretation (Barry, 2002, p. 32). Barry acknowledges that individuals are complex human beings who perceive the world and build perceptions of reality in response to their experiences and social interactions in a given context. She discusses multiple constructed realities as a conceptual feature of qualitative research and a contrast to the notion of a single, measurable reality as in quantitative research. Similarly, McAllister (2002) recommends an interpretative research approach to data such as the personal constructs and classroom actions of individual teachers. Such data are not well represented when collated and interpreted as absolute and measurable, as is assumed in quantitative research.
Personal construct theory suggests that each participant has his or her own interpretation of educational risk and consequent classroom decision-making. The qualitative paradigm is sensitive to knowledge, not as fixed, but “created in interaction amongst people” (McAllister, 2002, p. 23). Action research enables researchers to be sensitive to an array of personal constructs, and to represent sharing and changing personal constructs with participant teachers. (This phenomenon is later labeled co-construction). Working within the qualitative paradigm, I sought to “describe, explain, interpret and understand the meaning of the social phenomenon... as experienced by the individuals in their particular context” (McAllister, 2002, p.23).

Qualitative method, particularly action research reported through structured narratives, can provide “deeper understanding of the social phenomenon” of interest here, than could purely quantitative data (Silverman, 2000, p. 8). Regardless of researcher preferences for quantitative or qualitative research paradigms, procedures used to ensure rigorous critical standards and to sort “fact from fancy” (Silverman, 2000, p. 12) are always important. My choice of methods to scrutinize data and researcher reliability and validity are documented and critiqued in later chapters.

The use of a qualitative research approach assumes that the social phenomenon of teachers’ decision-making (about language-based educational risk in early childhood classrooms) can be interpreted with teacher participants in their classrooms. Hence, I proposed to collect data from early childhood classrooms as a participant observer and participant researcher interpreting classroom practice. Researcher-teacher dialogue and cyclical planning, teaching and reflection, would verify my observations and interpretations of teachers’ pedagogy. Action research encourages the continuous building of “informed understandings” by research participants. Consequently, language development practices for children with language-based educational risk could be regularly planned, implemented, observed and reflected upon with individual teachers.

In this study I chose to conduct a year-long action research project in one rural primary school. I worked with ten early childhood teachers because it could not be anticipated or known from the outset, which teachers would engage in the
development of processes for supporting students at educational risk. Neither could it be known at the outset, which teachers’ data would most usefully contribute to an understanding of processes of development (co-construction). I expected that action research with ten teachers would provide sufficient relevant data from which I could select out and report pertinent action research outcomes.

In qualitative research a number of individual participants provide insights and understandings of one phenomenon (Fehring, 1999). In my research the phenomenon is teachers’ engagement in the development of useful processes, for their teaching of students at educational risk. The other important feature of qualitative research is that participants are not necessarily selected to demonstrate common responses or outcomes to one research opportunity. The action research cycles used in this study facilitated the tracking and reporting of similar and dissimilar responses to co-construction opportunities.

**Action research**

Wadsworth (1997) suggests that all research is really about evaluation and action. She distinguishes “action research” as that which explicitly deals with an action component, where “change is understood as inevitably resulting from the research process” (p. 36). Wadsworth’s definition applies to the current research. My intent was to track change in teachers’ thinking and teaching of students at educational risk, and also to understand how and why teacher-researcher processes influenced change. As recommended by Wadsworth, the expectation of change is built into the conscious plan, act, observe, reflect… stages of each research cycle in this study.

Cooperrider and Shrivasta (2001b) reflect on earlier studies to confirm action research as suitable for solving problems in complex organizations. These writers recognize two strengths of action research. The first is the practical sequence of standardized steps directing data collection: diagnosis, information gathering, feedback and action planning. The second strength is the assumption of constant “interplay between solutions, results, and new solutions” (Cooperrider & Shrivasta, 2001b, p.1). Planned actions provoke problem solving via re-evaluation, further information gathering, feedback and action planning in a cyclic way. Such a method
fits well with the daily practice of classroom teachers who observe, monitor or assess students; intentionally gather further information as required; use this information to plan teaching and learning opportunities; and implement those plans. Tripp (1993) notes how teachers expertly implement practical and reflective judgements. Practical and reflective decision-making is common to classroom practice and action research.

Action research offers a way to interpret factors facilitating teachers’ decision-making and to verify interpretations through continuous participant dialogue. Teacher interpretations can be used to regularly validate researcher interpretations. Participant action research allows both the researcher and teacher participants to “get close to the phenomenon of interest and interact with it to maximize opportunities to understand it” (Barry, 2002, p. 32). I needed to be immersed in teachers’ usual contexts of language learning and teaching and to dedicate time and effort to developing their trust. This is part of the process of getting “below the surface of what is being observed and discussed” (Davidson & McAllister, 2002, p. 30) to collecting “thick” descriptive data (Holliday, 2002).

Action research facilitates the collection of thick descriptive data. Thick description is an important factor in ensuring that data work appropriately in qualitative research (Holliday, 2002). Holliday insists, “quantity and coverage are not the major, nor sufficient criteria for making data valid” (p. 77). Thick descriptions show “the different and complex facets of particular phenomena” (p. 78). In contrast to factual reporting, thick description is understood as detailing the context, intention, meaning and process of experiences. Thick descriptive data can be recognized by the analysis of the social context within which events or observations are recorded, as well as, by the intentional effort that researchers dedicate to selecting and connecting data items. In this study, I attended to the initial and changing culture of learning within the research school, and the social construction of classroom practices to promote oral and written language development for early childhood students. A significant part of each action research cycle was dedicated to clarifying the personal constructs, attitudes and preferences of participant teachers towards our planned change.

Action research data illustrate (or refute) links between teachers’ personal constructs, principles of decision-making and negotiated language development practices for
children at educational risk. Thick, descriptive data facilitate analysis of diversity among teachers. Holliday believes that by moving between thick description and available theory, researchers can validate their qualitative inquiry. With this mindset, I intended to do more than record teachers’ “schemes of concepts, developed as a result of actions and interactions with the world, yet ... anchored in the person’s beliefs and basic assumptions” (Keiny, 1994, p. 233). I planned to analyse the context, intention, meaning and processes facilitating change in participants’ constructs, their classroom decisions and their participation in the negotiation of language development practices. As well, both my self-reflective data and teacher data would be analysed. In turn, each of these tasks would be interpreted against grounding theories, applicable to teacher decision-making (as discussed in Chapter 1).

Bassey (1999) recognizes the advantage of participatory action research. He describes participatory action research as a particular type of case study that enables researchers to pursue and value heterogeneity in data. Conversely, Batten and Marland (1993) review participatory action research as a way “to attend to the generalities across teachers” (p. 64). I perceived my participatory action research task to include the interpretation of data from individual teacher participants, the recognition of heterogeneity and commonalities in data, and the rigorous use of data to inform my understanding of teachers’ decision-making processes in classrooms.

Bassey (1999) values in-depth qualitative studies, believing that the interpretation of differences between participants’ research outcomes cases can contribute to both educational policy and practice. He recognizes a need for rigorous research that “addresses the complexity of the various aspects of schools and schooling... for research that explores and takes account of the different objective experiences and subjective perspectives, and which acknowledges that qualitative information is essential” (p. x). From this perspective, Bassey expects that “research questions will be modified or replaced as the enquiry develops” (p. 67). The need for in-depth study, attention to the complexity of teaching in classrooms, and recognition of the objective and subjective influences on classroom-based research outcomes, are pertinent to the current study.
This research in early childhood classrooms is well-served by an action research design and the reporting of data interpretations through structured narrative. Pitman and Maxwell (1992) believe that “a continual process of researcher decisions and choices” (p. 753) guides qualitative research. This point is relevant when specifying participant teacher and researcher roles in this study. The next task was to understand and plan how qualitative inquiry could be aligned to teachers’ roles in the development of oral and written language in early childhood education, and to my intent to socially construct this research in classroom contexts.

Oral and written language development in early childhood education

Early childhood teachers play a critical role in developing the oral and written language of each child in their care. Here, I review literature that describes and interprets teachers’ roles in early childhood language development within early childhood classrooms. An understanding of the teacher’s actual and potential roles is critical to the subsequent overlaying of socially constructed action research in classrooms.

Students begin attending Western Australian primary schools from three and a half years of age. Early childhood educators value the years prior to school as they set the stage for the child’s continuous learning (Comber, 1998). Many children experience continuity between the language used at school and the language structures, patterns of use and expectations of language use in their homes (Kavanagh, 1991). Early childhood teachers know that each child beginning kindergarten has already acquired extensive speech, language and listening behaviours from his or her home language and culture (Fisher, 1999; Westby, 1994). Yet for some children, and for various reasons, the speech-language-listening skills they bring to school are unlike those expected by their teachers (McMahon, Carrigg, Kelso & O’Neill, 1998) or displayed by their peers (Bishop, 1997).

Early childhood teachers readily acknowledge oral language as a tool for learning. They assist children to develop forms of questioning, answering, commenting, contradicting, wondering, observing, naming, rehearsing, and organizing their mental representations through oral language interactions. As the children’s oral language
becomes more complex, it takes on some features of written language. More formal oral language genres used in classrooms have been described as literate-like oral language (Westby, 1994). Characteristics of literate-like oral language such as subject-specific vocabulary, lengthier sentences with more complex syntactic structures, and rehearsed language routines, can be elicited and encouraged as part of classroom language learning and teaching.

Research confirms that language learning is linked to academic, social and personal success. Fisher (1999) provides a summary of why language learning or “linguistic intelligence” is so important. “Most of human thinking relies on words. Words help us to express our thoughts and ideas (or concepts), and enable us to communicate them to others. Without the words we are unable to say what we mean” (p. 45). Early language learning is crucial to educational outcomes. “Linguistic intelligence… develops from an early age. (The) child’s ability to use words and to communicate what he knows through speaking and listening, reading and writing will be one of the keys to success in learning and in life” (ibid). Simon (1991a) regards early language learning as an important tool for all other learning in early childhood education contexts and later years. Early language learning is known to predispose the child to later use language to learn and to maintain language as an effective learning tool throughout life (Simon, 1991a; Westby, 1991; Vacca, Vacca & Gove, 1995).

The research literature examining language learning, language teaching, early childhood pedagogy and students with language-based educational risk, is extensive. However, relatively little is written about how individual teachers conceptualize, reference and use their judgements of language learning to plan language development opportunities for children at educational risk in the early childhood years. Related aspects of this topic are addressed in contemporary research. For example, Elkins (2002) discusses school-based teaching for students with learning difficulties and learning disabilities in literacy in Australian schools. Rohl and Rivalland (2002) provide six case studies of children experiencing literacy learning difficulties and examine the support each student is offered in their school.

Greaves, Fitzgerald, Miller and Pillay (2002) discuss the role of diagnostic information in planning and monitoring the teaching of students experiencing

Hammond and Macken-Horarik (2001) report on teachers’ views about “what is actually going on in primary schools in the teaching of English literacy” (p. 112). Mackin and McNaught (2001) provide information on literacy practices in seventy-nine early childhood classrooms and specifically consider the “lack of congruence in the perspectives of parents and teachers and implications for early childhood educators” (p. 133). Clearly, teachers’ decisions influence the language learning outcomes of individual children. “High quality teaching is most important in children’s literacy learning” since “a relatively small amount of the variance in early school achievement is accounted for by pre-existing child factors” (Rohl & Rivalland, 2002, p. 36-7).

Despite current principles of assessment, teaching and learning (Curriculum Council, 1998) teachers may possibly perceive language planning for students at educational risk as beyond their classroom teaching responsibility. Although whole school staff planning is recommended as a way to support teachers to plan appropriate literacy practices, less than one third of school staffs surveyed by Rohl and Milton (2002) reported the use of whole school programs for students at educational risk. Current theories of literacy teaching and learning support a range of literacy teaching practices. Allington (2002), Bomer (1998), Edwards-Groves (2002) and Wilhelm (2001) examine exemplary and explicit whole class literacy instruction. Flexible or mixed ability grouping, to encourage learning through social interaction, is supported by many educationalists (Cambourne, 2001; Flood, Lapp, Flood & Nagel, 1992; Raison, 2001; Wasik, 2001).

The quantitative study by Rohl and Milton (2002) provides findings from an Australian national survey about how schools cater for students with literacy learning difficulties. This study raises a number of issues about the expectations and direction
of literacy-learning support as provided by classroom teachers. For example, Rohl and Milton found that most schools assess “reading comprehension, spelling, word recognition and numeracy” (p. 25) but “around one third of schools’ assess oral language and IQ” (p. 32). This is despite the significance of oral language development to learning, particularly literacy learning. Rohl and Rivalland (2002) reiterate the importance of identifying speech, language and hearing problems in the early years since these are predisposing factors in literacy difficulty. These authors also comment on the difficulty teachers have determining the nature of students’ difficulties, unless they are able to access specialist services.

The Rohl and Milton (2002) survey detailed the assessment of students with literacy difficulties in Australian schools. Figures indicate that speech pathologists or classroom teachers were nominated as being involved in eighty percent of assessments of students with literacy difficulties. However, speech-language-listening tasks did not feature in the list of programs used to support students at educational risk. Rohl and Milton note that thirty three percent of schools report ‘other’ support programs being used with students at educational risk (2002, p. 36). The make-up of this ‘other’ group is not specified. Speech pathologists were reported to deliver support programs in eleven percent of nominated schools, but the type of programs they offer to students at educational risk, is not specified. Classroom teachers are reported to deliver support programs in eighty seven percent of study schools although only forty four percent of classroom teachers were said to have had some specialist training to teach students with literacy difficulties.

Recent studies reiterate my perception of the mismatch between students’ needs and the provision of appropriate literacy practices in Australian schools. Elkins (2002) notes, “students who need the most help may be being assigned to those least qualified to teach them” (p. 16). In the Rohl and Milton (2002) survey approximately eighty one percent of schools reported their use of individual withdrawal programs and small group withdrawal programs for students with literacy learning difficulties. In some schools, children with language-based educational risk are withdrawn from their classrooms to be supported with individual or small group language activities, conducted by Teacher Assistants (or Educational Assistants), who do not necessarily have specialist language skills. Furthermore, Elkins (2002) noted that “a substantial
proportion of support teachers have no specific training in collaborative planning and teaching” (p. 17). Just twenty eight percent of schools reported their use of whole class programs to meet the needs of students with literacy learning difficulty (Rohl & Milton, 2002). These figures are important in an early education context that expects all classroom teachers to be able to cater for the language learning needs of all students within socially constructed classrooms.

Socially constructed learning comes from Vygotskian theory (Wilhelm, 2001) and refers to the benefits of children working together to learn from one another, as opposed to teachers teaching content or processes without social interaction with or between students (Wilhelm 2001; Wilhelm, Baker & Dube, 2001). Child language literature recognizes the potential of meaningful social interaction, as available in classrooms, to facilitate language growth (Halliday, 1975; Isenberg & Jalongo, 1997; Pellegrini & Blatchford, 2000; Westby, 1998a, 1998b;).

Since children in early childhood classrooms come from diverse language backgrounds (Comber, 1998) and display a range of language strengths and needs (Simon, 1991a, 1991b; Simpson & Willson, 1994), early childhood teachers are required to plan and implement language learning programs with appropriate outcomes for all students. Intended learning outcomes define skills, abilities and learning strategies that children will display at a pre-determined time. For example, a Pre-primary child might be expected to use oral language to respond to peer conflict. Appropriate oral language forms would be explained, modeled and rehearsed within the pre-primary classroom as part of small group or whole class teaching. Early childhood teachers are required to select and implement language development practices to facilitate individual, small group and whole class language learning.

Children whose speech-language-hearing is different from that of peers are expected to benefit from language-learning opportunities provided through peer interaction and dialogue with supportive adults in developmentally appropriate early childhood programs (Isenberg & Jalongo, 1997). Indeed, opportunities to learn through meaningful peer interactions or scaffolded interactions with adults (Pellegrini & Blatchford, 2000) are regarded as potentially more effective than learning through teacher-centered dialogue (Isenberg & Jalongo, 1997). As children confront
problems or situations of interest together rather than alone, they are able to construct, review, challenge and build their understandings of topics through shared experiences and language interaction. A need exists to investigate how teachers make decisions about speech-language-hearing impaired students within this context.

Rohl and Milton (2002) raise the issue of equity of access to appropriate educational services for students with learning difficulties. These authors make eight recommendations for change in the way school staffs respond to students with oral language, literacy and numeracy difficulties. The third recommendation is of particular interest to the current study. It states:

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 children who need it (Rohl & Milton, 2002, pp. 45-46).

This recommendation draws attention to the importance of questions asked in the current study. Rather than recommending systematic procedures for assessing literacy, in this study, I am concerned with how teachers’ make appropriate judgements. Teachers’ accurate identification of the particular strengths and needs of students at educational risk within each class facilitates the planning and implementation of appropriate teaching and learning activities, “to ensure that all students achieve agreed outcomes” (Curriculum Council, 1998, p. 6). Hence, I asked: How do judgements about who is at educational risk influence classroom practice? What factors effect changes in teacher thought and pedagogy for these students? How can I find out?

I planned to listen to and probe beneath teachers’ personal constructs of educational risk, their perspectives about language teaching and language learning, and their perceived needs for supporting students. Barry (2002) recommends that qualitative researchers listen, to be “prepared to be led where (participants) want to take you rather than you leading them to where you think they need to be taken” (p. 33). My intent was to build a working relationship with early childhood teachers, first as a
participant observer in classrooms and later by negotiating language development plans as a participant researcher. Barry’s “listening” was a way of understanding teachers’ views of oral and written language development in early childhood classrooms. It was a way of learning how to proceed with particular teachers in their classrooms.

**Social construction of classroom research**

In this context, the need is “to think of reality as being a dynamic concept that is re-constructed in negotiation with each of the informants to represent their own construction of reality” (Barry, 2002, p. 32). From a Vygotskian perspective (Wilhelm, 2001) this research could be constructed through purposeful interaction with participant teachers. Through sharing thinking and pedagogy in early childhood classrooms, exchanging examples of language teaching and language learning, and responding to individual students at educational risk in different ways, research participants create a context of learning. Research questions and research design could be reviewed within this context of reciprocal learning. Understanding what one knows and how one knows it, refines respective roles and effects qualitative research outcomes.

In the words of Twomey Fosnot (1989), “Learning is a case of going from the known to the unknown” (p. 39). Sharing the classroom teaching of children with language-based educational risk is a way for research participants to move from what they know about teaching and learning to what others know. Before this research project, personal theory and prior experiences (rather than intentional empirical inquiry) informed my understandings of how teachers undertook oral and written language development in early childhood classrooms. This research was an attempt to facilitate evidence-based learning, with classroom teachers, about how they might co-construct theory and classroom practice, with language specialists, for students at educational risk.

Early childhood teachers provide environments that facilitate learning through individual discovery, peer and adult interactions (Pellegrini & Blatchford, 2000). Their responsibility includes helping all children develop their intelligences (Fisher
1999; Gardner, 1997). Research specifies teachers’ roles and actions to facilitate language learning in early childhood classrooms (Ashton & Cairney, 2001; Hammond & Macken-Horarik, 2001). I share a view that early childhood classroom teachers and language specialists need to recognize and facilitate opportunities for socially constructed language learning within their programs (Isenberg & Jalongo, 1997; Pellegrini & Blatchford, 2000). I needed to know how teachers would respond to this possibility and which factors would facilitate their engagement in shared learning.

I needed a research method (or methods) that could capture how teachers thought about and practiced developing oral and written language in early childhood classrooms. Potentially, teachers’ words and insights (Davidson & McAllister, 2002) about their selection and implementation of language learning opportunities, as part of their teaching role, could provide necessary research data within school contexts. I expected to understand factors facilitating teachers’ decision-making about language development in the “experiential... sustained and intensive” (Broadley et al., 2000, p. 138) realities of early childhood classrooms. I planned to elicit thick descriptions, based on interactions with teacher participants, and then conduct context-specific data analyses and interpretation. Numerical data alone were unlikely to facilitate such understandings (Silverman, 2000).

Matching research method to research questions

Cooperrider and Srivastva (2001a, 2001b) highlight the importance of matching research method to research questions because method is significant in determining research outcomes. Since this study focuses on how individual teachers construct classroom language development planning for students at educational risk, I acknowledge current child language theory and guidelines for best practice (Rice, Shortland-Jones & Meney, 2001) and hypothesize about factors encouraging change in teacher thought and pedagogy. My task was not to judge the relative merit of language practices displayed by individual teachers. Instead I chose to interrogate influential factors on teachers’ decision-making about classroom language planning.
Qualitative research methods, particularly participatory action research, offered a way to collect thick, descriptive data; form analytical statements, interpret research data, recognize links between analytical statements and research data, and finally present fuzzy propositions or fuzzy generalizations based on research data (Bassey, 1999). From the research design stage, I regarded the sampling of classroom language development practices and teachers’ personal constructs of their pedagogy, as essential data. My plan was to begin this study as a participant observer in early childhood classrooms and to conduct individual teacher interviews early in the data collection process, as a way to “build a relationship of trust, where the other person feels free to speak” (Wadsworth, 1997, p.39). I planned ways to respond to each of the three research questions.

**Participant observation and individual teacher interviews**

The first research question asked, *To what extent do teachers’ personal constructs of language-based educational risk determine their pedagogy for students at risk?* I planned to respond to this question in two ways:

1. To document observations and examples of teachers’ apparent thinking and pedagogy, beginning with four weeks as a participant observer in early childhood classrooms.

2. To collect data about teachers’ thoughts and pedagogy specific to students at educational risk through individual teacher interviews.

Participant observation provides a basis for framing questions during subsequent individual interviews. Participant observation is also a way to begin to interpret the uniqueness of each teacher and his/her classroom within the broader context of the study school. In this study, the initial interviews were to be arranged within the four weeks of participant observation. In this way, teacher interview comments could be used to check the reliability and validity of my interpretations of teachers’ words and actions during our shared classroom time.

Teacher interviews were proposed for other reasons also. Wadsworth (1979) comments that the individual interview is “certainly always a reciprocal interaction in terms of the interviewer inevitably communicating some of his or her own self” (p.
Wadsworth believes, “reciprocity not only can’t be avoided but is actually necessary to any human interaction.” She cautions that reciprocity should be “consciously thought about… as bias is inevitable. Reciprocity also includes shared values and purposes and the communication of these goes way beyond dress and manners” (ibid). Individual interviews are a way to engage the interviewee in a “particular kind of conversation… to get answers to particular questions, to hear the other person’s views and ideas, and about that person’s position and life” (Wadsworth, 1997, p. 38). Although some such information could be obtained from questionnaires or group discussions, individual interviews were selected to focus on individuals in a personable way and to establish professional dialogue as a means of ideas exchange during the course of this research. From the outset, reciprocal interaction with participant teachers was encouraged. (The details of individual interview questions, permission to use the data, data presentation and discussion are given in later chapters and Appendixes.)

In this study, data collected as a participant researcher in classrooms provide a sample of early childhood language development practices. Time, numbers and the labor-intensive nature of classroom language development data collection prevented surveying of an entire population of early childhood teachers in one rural locality. Wadsworth (1997) recommends sampling as part of action research. She believes that sampling can “ensure that the results of techniques such as interviews… will be useful as valid representations of the thoughts and actions of the general ‘populations’ being studied” (p. 36). She regards sampling as a practical alternative to surveying.

Here, I sampled the classroom language development practices of nine early childhood classroom teachers, and one language support teacher, in one rural, double-stream primary school. I anticipated that classroom data, collected as a participant observer, could provide useful examples of language activities, the language learning opportunities presented to students; the decisions teachers make about whole class, small group, individual or withdrawal learning situations, and the use of explicitly oral, written or oral and written language learning tasks. I recognized that classroom participant observations could include the documentation of classroom teaching and learning, as well as, the researcher’s part in classroom
interaction. In this study, I participated as a supportive adult who was “visibly useful” (Nash, 1973, p. 9) in early childhood classrooms. In this way, I could build relationships with the teachers and students, and sample classroom language development practices for students at educational risk.

The critical feature of participant observation is that the researcher is “highly aware and very reflective about the social situation being examined” and keeps records for later use (Wadsworth, 1997, p. 54). As a classroom participant observer, I could collate data about how oral and written language samples were elicited in classroom contexts, how parent information about students’ language strengths and needs was used, and how available language support resources or personnel were integrated to whole class planning. Initial participant observation data were used to begin language development planning with participant teachers as opportunities arose. That said, the interpretation and confirmed trustworthiness of such data is what determines whether or not a study is representative beyond the context of data collection. This proviso guided research method throughout this study.

Examination of the demographics of study participants is another way to consider how representative a study sample is of broader populations (Wadsworth, 1997). Hence, my sampling included classroom teachers’ language development practices, implemented with Kindergarten to Year 2 students. (In 2000, these students ranged from three to seven years of age). I considered that one school year would provide sufficient opportunities to document teachers’ identification of the language learning strengths and needs of new students, their planning and implementation of short and long term language development activities, as well as, to observe teacher-parent-language specialist relationships and the influence of school policies on classroom language development practices.

**Extended data collection through participatory action research**

Extended data collection was also important in addressing research question two, *Which influential factors shape early childhood teachers’ thoughts and pedagogy for students at educational risk?* I recognized that data collection would need to continue for sufficient time to document changes. One school year is a reasonable time to observe, document, facilitate, interpret and check the trustworthiness of data.
suggesting change in teacher thought and pedagogy. I intended to use initial interviews and classroom participant observations, elicited from teachers in the first four weeks of the new school year, as baseline data for planning change through subsequent action research cycles. I planned to verify or amend my initial interpretations as I continued to collate data from each teacher in each classroom.

Through dialogue, shared classroom experiences and understandings of our respective personal constructs I anticipated the participant observer role to become one of participant researcher. In the participant researcher role I expected to facilitate the negotiation of classroom language planning with willing teachers, as well as, continue to support existing classroom practices. I intended to document regular professional dialogue with teachers throughout the research year and to use data recorded in the participant researcher role to substantiate apparent changes in teachers’ thought and pedagogy. Most importantly, factors perceived to facilitate change in participant thought and pedagogy would be continuously interpreted, analysed and verified with teacher participants, through action research cycles.

The conducting of final teacher interviews was another way to test cumulative data and interpretations of data. The elicitation of teachers’ reflections through final teacher interviews would supplement verification procedures built into action research cycles during the school year. During initial and final interviews, I planned to probe teachers’ points of view about the type of support they required to address the language development needs of students at educational risk in their classes. I had three reasons for such probing:

1. To prompt teachers’ reflection on their classroom thinking and pedagogy.
2. To sample teachers’ self-reflections on their confidence and competence to identify students’ language characteristics and to plan and implement language activities. Teachers’ reflections could be compared and contrasted to my interpretations of their self-reflections on classroom practice.
3. The sharing of reflections on classroom planning and language development practices could stimulate further negotiations about potential changes in language pedagogy.
Since this study was about tracking changes in ordinary teachers’ thoughts and pedagogy in an ordinary school, I needed to represent a range of teacher experiences, competencies, and personal constructs of early childhood language development. This research was conducted in a double-stream primary school so that I could access teachers with a range of experiences, constructs and competencies. My existing professional association with the school, allowed me to build on established working relationships with each of the early childhood teachers. This prior association had provided opportunities to informally sample the range of experiences, competencies and constructs displayed by early childhood teachers. I knew that the participant teachers ranged in experience from new graduates to those with more than twenty years of teaching experience. This action research enabled me to collect extensive data from Kindergarten to Year 2 classes with ten teachers over one school year.

Since the school had two classes of students at each year level, I hoped to work with at least one teacher at each year level. As stated earlier, ten teachers opted to be involved in this research project over one school year. One teacher taught the two Kindergarten classes on different days, eight teachers taught the other six classes of Pre-primary, Year One and Year Two students. The tenth teacher participant was a Learning Support teacher who worked with children in Years One and Two. As shown in Appendix A, these teachers represented a range of teaching experience specific to early childhood students.

Action research methods were used to understand how teachers thought about language-based educational risk and to track change during this study. I planned to observe and document teachers’ use of oral and written language sampling in classrooms, to collect data about how teachers judged students’ oral and written language status and to observe the extent to which assessment and monitoring of language risk informed teaching. Participant observation in the first school term of the year was an opportune time to collect language assessment data from incoming students with classroom teachers. Terms two and three would provide sufficient amounts of time to engage with teachers in planning language development activities as required. I anticipated that school Term Four data would include participants’ reflections on language planning outcomes, changes in teacher thinking and
pedagogy during the research year, and teachers’ clarifications of influential factors in co-constructed processes.

Each action research cycle was expected to coincide with one school term. However, the specifics of the content, process and schedule of each cycle could not be pre-determined. Instead, details of classroom-based language planning would need to be constructed with, rather than for, classroom teachers. In addition, school Term Four data were to verify researcher and teacher reflections and interpretations. I intended to include data triangulation processes in Term Four and to document my learning as a qualitative researcher using action research with classroom teachers.

**Generalizations from action research**

This overview of my use of action research method in classrooms also applies to research question three: *What are the implications of the co-construction of classroom language development plans for effecting transitions in teacher thought and pedagogy?* The reference to co-construction and the implications for effecting transitions in teacher thought and pedagogy, go beyond solving the problems of the classroom teachers in this study. This question is intended to examine the potential of co-construction beyond the research classrooms to theory development.

Although data collected in any one study are constant, those data can be used in various ways. Action research data collected in this study could be interpreted in terms of teacher, student or researcher learning outcomes in one school context. However, this study was extended in the fourth action research cycle to include teachers’ broader reflections on change processes. At another level, the interpretation and reporting of these empirical beginnings of co-construction could be used to discuss the theory and practice of school-level change.

Bassey (1999) recommends that research can be written up in various forms dependent on the desired outcome of the written product. In this study, the linear sequence of structured reporting describes overlapping action research cycles. The narrative includes the “essence of the claim to knowledge... how it was substantiated... (and) fuzzy generalizations” (Bassey, 1999, p. 84). Individual
teacher narratives provide thick descriptions of classroom realities and teachers’ responses to change (Sabar, 1994; Hammond, 1996).

Here, the use of action research, reported as selected and structured narratives, highlights teachers’ contributions to interpretive qualitative inquiry. Data are used to explain the limitations of existing theory and to explore the potential of a theory of co-construction. Data demonstrating both the content and processes of co-constructed language planning are referenced and analysed. The dual focus on the content and processes of co-construction addresses the complexity of classroom language planning for students at risk and illustrates research potential within early childhood classrooms.

**Selective reporting and structured narratives**

In this action research, the phenomenon of interest is teachers’ judgements about the usefulness, or otherwise, of planning processes supporting their teaching of students at educational risk. Fehring (1999) examined teachers’ judgements about students’ literacy achievement in three Victorian schools. In both of these studies, researchers needed to determine when sufficient data had been collected to adequately understand the phenomenon of interest. Fehring reported on three teachers’ judgements. I selected important data from four of the ten participant teachers and integrated these to one structured narrative.

This research thesis is written in a narrative style to reiterate the importance of particular individuals, contexts and teacher-researcher interactions, to the eventual research conclusions. Although each of the ten teacher participants in this study could be reported as separate detailed narratives, I do not believe that each of these teachers’ stories would equally enhance our understanding of the phenomenon of interest. Selection is necessary in qualitative thesis reporting.

In later chapters, I explain how the action research cycles used in this study facilitated the tracking and reporting of teachers’ dissimilar responses to co-construction opportunities. Teacher data, selected for translation to the final narrative, were not selected to demonstrate teachers’ common responses to this
research opportunity. Instead, data from four of the teachers (Penny, Jacqui, Toni and Maree) were very deliberately chosen, to demonstrate the greatest diversity in teachers’ responses to the year-long action research process. Data from the six other teachers are included where doing so enhances the reporting of research outcomes.

From the action research data on which this structured narrative is based, I could report common outcomes for the ten participant teachers. For example, all teachers evidenced some change in their thinking and practice during the research year. However, the establishment of common outcomes for ten teachers was not the point of this research. Alternatively, I revisited teacher data and modified the content of this structured narrative to report the different responses of particular teachers to this action research. This point is important because two of the four focus teacher stories (Toni and Maree) would have been deleted as ‘atypical’ if I was seeking to show common research outcomes, or to strengthen my case for the potential of co-construction processes for all teachers.

**Teachers as participant researchers**

Effective action research in classrooms depends on voluntary participation by early childhood teachers. Grant and Walsh (2003) document the benefits of teacher research, from their perspective as school-based researchers in South Australia. Perceived benefits include teachers’ opportunities to “tell their own stories”, opportunity “to reach out to the wider community”, developing their sense of “professional identity and competency” and “being empowered to ‘push the boundaries’ of literacy teaching, to invent new ways to engage students and to experiment and trial ‘new ways of learning’… for teachers and students alike” (pp. 5-6).

Grant and Walsh (2003) recognize that questions from conversations about teaching practice can be incorporated into research. They reiterate how teachers’ questions, “can direct teacher awareness, knowledge and understanding around the theory that learning takes place within a particular socio-cultural context and setting” (p. 4). Hence, I used participant observation and individual teacher interviews as a way to introduce research practice to the school. Next, through interactions with me as a
school-based participant researcher, teachers were encouraged to select areas of interest to explore in ways that might improve our learning and practice.

Teachers value taking control of their professional lives and were willing participants in the current research. Teachers were introduced to the experience of research learning through the development of our teacher-researcher partnerships. As we shared the first four weeks of a new school year, we began to “consciously start analysing” what was happening in the classrooms and to identify issues, concerns and questions (Grant & Walsh, 2003, p. 5). Hence, a pattern of collaborative sharing with participant teachers was established early in the research year. Processes for consciously analysing events, students’ language strengths and needs, and the selection of language development activities were pivotal in my transition from participant observer to participant researcher.

Relationships built with teachers, in shared classrooms, facilitated the exchange of questions, interpretations and issues as we affirmed the focus of our action research. My resign design demonstrated that participants must own participatory action research:

Not only does it explicitly require an inquiry group to ask the questions and follow through the process, but any ‘findings’ and new recommended actions cannot be imposed…. They must be accepted by ‘the researched’ and ‘the researched for.’ Hence all relevant participants must be involved every inch of the way… it must be their research, in their interests and something they can affect so it works better for them (Wadsworth, 1997, pp. 61-62).

Reporting research findings

Perry (1995) outlines important differences between conducting action research and reporting action research outcomes. He believes that “the philosophy and processes of action research are broader and more complex” than those reported (p. 7). Perry argues that the action research project is “relatively unfocused, emphasizes practice and has outcomes of reflections which include propositional, practical and experimental (group and personal) knowledge” (ibid). In contrast, he perceives the
reporting of action research projects (as in Ph. D. theses) as emphasizing the researcher’s additions to prepositional knowledge published in the literature. The qualitative researcher needs to defend data selected and reported from the extensive data collected. Similarly, Bassey (1999) recommends systematic and selective data reporting.

One of my research tasks was to make a judgement about which data should be reported to adequately understand the phenomenon of interest. In later chapters I describe how working with ten participant teachers enabled me to represent the most important research outcomes by highlighting four of the ten teacher narratives. Data from the ten teacher participants were examined in detail to further my understandings and rationalize selective data reporting. In later chapters, I explain how data from focus teachers shaped my participant researcher learning.

Research question 1 required that I document and understand teachers’ personal constructs of language-based educational risk, their judgements and expectations of educational outcomes for students at educational risk, and their particular teaching and curriculum decisions. Research question two required the analysis and interpretation of factors influencing change in teacher thought and pedagogy for students at educational risk. Research question three necessitated the making of generalizations about the potential of co-constructed processes for facilitating change in teachers’ thoughts and pedagogy. The structured reporting of teachers’ narratives, based on our shared experiences of four action research cycles, is an effective way to clearly represent research outcomes.

In Chapter 3, I extend this research design overview. I detail how my research processes ensured my accurate representation of individual teachers’ interpretations of language teaching and learning decisions. As I detail the planned review of action, observation and reflection for each school term, I make links to data collection, use, interpretation and verification. Generalization processes are also described.
Scientific rigour in early childhood classrooms

Fehring (1999) measured trustworthiness in qualitative research in terms of credibility, transferability, dependability and confirmability. She acknowledged how easily teachers’ conversations, observations and interviews can be “influenced by the researcher’s own personal prejudices” (p. 40). She recommends constructivist research method (as in the current study) to check and minimize researcher bias. Fehring acknowledges the alternative terms, internal and external validity, reliability and objectivity as indicators of scientific rigour in quantitative and earlier qualitative works. In the current study, processes used to scrutinize the accuracy and usefulness of research data and researcher interpretations, are embedded in the selection and telling of teacher stories.

The establishment of trustworthiness is “the hallmark of scientific rigour in qualitative studies” (McAllister, 2002, p. 23). McAllister’s recommendations for establishing trustworthiness are similar to those given by other researchers (Bassey, 1999; Fehring, 1999; Davidson & McAllister, 2002). Processes emphasized include engaging with research participants over a long period of time; providing opportunities for participants to comment on data emerging; collecting data from multiple sources; setting up triangulation processes; documenting methods of data collection and analysis in sufficient detail for others to replicate the study or critique links between prevailing theory, research method and research outcomes. The specific application of such processes in this study is outlined in the next chapter and expanded in teacher narratives in chapters four through seven.

Davidson & McAllister (2002) explain how processes of trustworthiness contribute to rigour in research design. They promote prolonged immersion in the context of inquiry as a way for researchers to build trust with research participants and to understand issues, context and data at more than a superficial level. Triangulation is regarded as a way to check that data are comprehensive, as sources are checked against one another. Multiple data sources build confirmability when similar interpretations are drawn from various data. Dependability is demonstrated with an audit trail of researcher actions and decisions.
Davison and McAllister (2002) also discuss the notion of authenticity, and relate it to credibility. They describe authenticity as “the degree to which participants’ meanings and understandings of their world, ‘voices’, feelings and ideas have been represented” (p. 30). Credibility is indicated when research findings can be believed by those they are written about. These ideas were considered in the writing of this structured narrative.

**Summary**

This discussion of early childhood classrooms as contexts for qualitative research clarifies the importance and potential of teachers as participant action researchers. This chapter serves as an overview of action research, including participant observation, individual teacher interviews and extended data collection. In early childhood classroom research, teachers need to validate researcher interpretations of the processes and outcomes of reported change.

Here, my intention was to prepare the reader for the subsequent reporting of this action research using a structured narrative format, focusing on the development and interpretation of co-constructed change. I acknowledge that researcher interpretations alone cannot ensure that changes in teachers’ thinking and practice are well represented. In the next chapter I specify how reciprocal teacher and researcher learning in this study were determined by the research processes used, and by the thickness and trustworthiness of shared data.

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1 The year 2000, when these data were collected, was the last year that West Australian school children could enter Kindergarten at three years of age. From 2001 children began Kindergarten from three years and seven months of age.
Chapter 3

The Language Development Project

“Action researchers are using systematic and critical enquiry in an attempt to improve their practical situation”
(Bassey, 1999, p. 41).

Introduction

The Language Development Project (2000) was the working title for this research in progress. Although not the thesis title, this descriptive title was used by the school community during the data collection year and for subsequent reference to this study.

This research provides an empirical database from which to determine how individual teachers make and use language development decisions. It provides a way of knowing (as opposed to theorizing) the extent to which teachers’ personal constructs of language development determine their responses to students’ language-based educational risk. My belief is that this empirical research can explain the extent to which the teachers’ classroom language development practices were shaped by the co-construction of language development plans.

As discussed in Chapter 2, teachers’ experiences of daily decision-making about the language development practices they select and implement in their classrooms are quantifiable and able to be represented objectively. However, the expectation of researcher detachment in quantitative methodology (McAllister, 2002) is not appropriate to this research. Here, I interpret the complex phenomenon of early childhood teachers’ decision-making about classroom language development practices. I argue that qualitative methodology is more suitable for exploring “a topic about which little is known” (Davidson & McAllister, 2002, p. 28).
This research is not intended to represent teachers as a homogenous group of professionals whose judgements can be predicted and quantified (although this may be possible in carefully designed and constrained circumstances). The idiosyncratic responses of individual teachers are of interest here. Teachers’ descriptive data contribute to understandings of classroom realities and illustrate the extent to which available theories of decision-making account for individual teacher’s mindsets. Here, I was motivated by the need to understand, for example, why and how teachers respond quite differently to the same child, or disagree about whether a particular child is at educational risk and how they might respond to that child in their classrooms. My intent was to “retain holistic and meaningful characteristics of real-life events” (Davidson & McAllister, 2002, p. 29).

In Chapter 2, I introduced qualitative methodology as a way to incorporate multiple data sources arising from teachers’ decision-making situations. In this study, links are made from data illustrating variation in teachers’ responses to decision-making opportunities, to analytical statements and interpretation of these statements. This “iterative process” of establishing, rejecting or modifying analytical statements and testing them against data (Bassey, 1999, p. 71) is a defensible qualitative research method. In this chapter, I detail the use of iterative action research processes during the Language Development Project (LDP). I explain research methods and processes as used in the LDP, to facilitate reciprocal teacher and researcher learning. In addition, principles of trustworthiness are examined so that “qualified general statements” (Bassey, 1999, p. 12) can be made and anomalies in data can be valued in later chapters.

**Constructivist interpretive methods**

The Language Development Project is described here as a constructivist, interpretive study. In accord with Bassey (1999) this research with early childhood teachers included “a search for deep perspectives on particular events and for theoretical insights” (p. 44). I acknowledge that empirically based perspectives and insights contribute to later discussion about the potential of co-constructive classroom language development planning in other educational contexts. No certainties about co-construction in other educational contexts can be stated.
Fehring (1999) comprehensively references the constructivist interpretive approach. She sought to combine features of Lincoln’s (1993) constructivism, the joint representation and recreation of individuals’ socially constructed realities, with Gilbert’s (1992) interpretation of observational data in contexts of reality. Fehring states that the combination of constructivist and interpretive processes is a way of ensuring the teachers’ voice is not recreated by researchers’ own constructions. She attends to settings, situations and contextual relationships prior to interpreting data about influences on teacher judgements. Reference to Fehring is important to the current study as the research project most closely related in content and method to that presented here.

When the current study was conducted with ten early childhood teachers in a single rural primary school, the school context was expected in some way to be typical of something more general. The issue of teachers’ thinking and pedagogy specific to students at educational risk was explored. Issues were kept in focus by attention to individual teachers and constructivist, interpretive methods. Plausible interpretations were created from this extensive exploration of shared thinking and practice with ten teachers. Selected teacher stories are used to weave study interpretations into one structured narrative (in Chapters 4 to 7).

Like Stringer (2004), I believe that the systematic processes of action research are tools for teachers to enhance their classroom planning and school program development. Teachers’ professional capacities were extended as they facilitated my data collection, analyses, interpretations and report writing. I used Bassey’s (1999) seven stages for qualitative research in educational contexts and accepted his conviction of the benefits of constructivist, interpretive research:

There is a need for rigorous research which does not ignore, but rather addresses, the complexity of the various aspects of schools and schooling: for research which explores and takes account of different objective experiences and subjective perspectives, and which acknowledges that qualitative information is essential, both in its own right and also in order to make full and proper use of quantitative indicators (Sikes, in Bassey, 1999, p. x).
Stage 1: Identifying the research issue

The first of Bassey’s (1999) seven stages of educational research is *identifying the research issue, problem or hypothesis*. In Chapter 1, I introduced the research issue of possible connections between teachers’ personal constructs of early childhood language development, principles of social judgement theory and negotiated classroom language development planning. This notion of connections was translated to research questions in the first chapter. Chapter 2 included details of early childhood classrooms as qualitative research contexts. I considered teachers’ opportunities to be involved in oral and written language development and the social construction of classroom research. The benefits of teacher participation and the necessity of scientific rigour were specified. Throughout this action research, identification of the research issue, context and method were continuously refined using Bassey’s (1999) methodological structure.

Stage 2: Research questions and ethical guidelines

Stage two, *asking research questions and drawing up ethical guidelines* is critical in defining research directions and ensuring respect for truth and persons. Prior to data collection, a research proposal outlining this study was presented to academic staff and an invited audience at the University of Notre Dame Australia (Bochenek, 1999). The presentation of the research proposal was an opportunity to invite constructive criticism of my research context, questions and design. It was also an opportunity to debate the importance of this study and the intended outcomes. Procedures for establishing ethical standards and the trustworthiness were presented to the audience and prompted the review and redefinition of the proposed action research.

A revised research proposal was presented to school staff in October 1999, in anticipation of data collection in 2000. This was followed by an overview of the theoretical context of this research presented to early childhood teaching staff at the project school. A letter, sent to the school board, invited comments, questions and consideration of the study in the school during 2000. Data collection began after the approval of the University Ethics Committee, the School Board and ten early childhood teachers. The school Principal confirmed approval late in 1999.
All participant teachers, educational assistants, parent participants and parents of children at educational risk (on behalf of the children) signed consent forms detailing data to be collected in the course of the study, the use of that data for analysis, interpretation and subsequent presentation to the school and broader communities. I explained to all study participants that the data and findings of this study would be used for professional purposes in the future. No end date was assigned to data usage to ensure that the data could be maximally useful to the educational community. Data anonymity was addressed with the use of data codes, teacher numbers and pseudonyms. The University Ethics Committee approved data consent forms as shown in Appendix B (Consent to use child data) and Appendix C (Consent to use adult data).

Actions arose from continuous reflection and questioning during this research project. Barry (2002) states that a preparedness to modify research decisions, directions and initial research questions is part of the responsive and sensitive mindset beneficial to qualitative researchers. In the current study, questions and procedures were continuously reviewed through action research cycles with participant teachers. When modifications were made to the initial research plan, I reviewed the ethical guidelines of the study to ensure that the action research remained within acceptable standards.

Stage 3: Collecting and storing data

Two of Bassey’s (1999) recommendations for data management particularly influenced the collection and storage of my research data:

1. Be systematic in data collection.
2. Begin data analyses as soon as possible.

Early and continuous data analysis was particularly salient to co-constructive processes. During this study, the teachers and I shared observations, discussion, planning, selection and implementation of classroom language development practices. We regularly reflected on our observations, negotiations, classroom practice and reviews of teaching and learning, as a way to confirm or modify cumulative interpretations. This interactive style of negotiated language planning included the exchange of opinions and discussion about points of confusion. Most
importantly the documentation of continuous dialogue was a way to track participants’ personal constructs and negotiated language development practices.

Details of the content and processes of negotiated language planning were recorded in several ways during the school year. Methods of collecting and storing data included:

- **Teacher identification codes** were attached to all LDP documentation, as appropriate. Teacher codes began with a T=teacher, followed by the year level taught, the first initial of the pseudonym used, and a teacher number – as an alternative to the pseudonym. For example TIP5 identifies a Year 1 teacher, Penny, who is Teacher 5 in this study.

- **Child identification codes** were used on all LDP student data. Child codes began with a C=child, followed by the child’s school year level (K=Kindergarten, P=Pre-primary, 1=Year 1, 2=Year 2.) The last two letters coded the child’s name.

- **A daily research diary** included participant observations and reflections on classroom actions, planning with teachers, incidental observations and issues arising during the year. The Research diary is referenced as CB=researcher’s initials, RD=Research diary and the date of entry.

- **Audio-tapes.** Whenever possible, planning discussions with teachers were taped to allow for review, transcription and data analyses. Similarly, all teacher interviews during Terms One and Four were taped. (Dated with a teacher identification code added.)

- **Transcripts** from audiotapes are referenced with the teacher code followed by DI=data item numbers (eg. T1P5DI1-2 indicates data items one and two from teacher Penny.) Data items were numbered to indicate each new piece of information. At times, a conversation is summarized and referenced with the teacher identification code and the date the tape was made (eg. T1S29/9/00).

- **Interview notes:** refers to comments recorded as interviews were conducted. These are available from the research archive (with dates and teacher identification codes added). They are not directly referenced in this text.
because interviews were transcribed, and/or the source of research diary entries.

- **An Oral and Written Language Database (OWLD)** was completed for each of the 33 focus children in the study (and others at teacher’s requests). An outline of the database is given in Appendix D. The OWLD was updated each school term, labeled as OWLD1, OWLD2, OWLD3 and OWLD4 respectively.

- **A Summary of sessions** outlined the strategies used in classrooms particularly for focus children in each year level (Kindergarten to Year 2). They were given to parents and teachers at the end of the school term. A Year 1 example is given in Appendix E.) Teachers refer to these as “summary” or “session notes.”

- **Co-constructed classroom practice** was documented in many ways with participant teachers. Archived evidence includes:
  * Working notes from discussion, planning and review sessions,
  * dated daily lesson plans for each early childhood class, filed by school year level and teacher identification code, in chronological order for the year,
  * further oral and written language samples / assessments collected during the implementation of classroom activities,
  * copies of teacher-researcher activities prepared for classroom use,
  * notes detailing activities and outcomes, given to teachers after each shared classroom session, and
  * incidental written correspondence between research participants.

My reflections about co-constructed practice are also recorded as in the Research Diary (eg. CBRD29/2/00).

- **Documentation of staff workshops/ professional development sessions** conducted as part of the LDP. These are described, as relevant to later text.

- **Staff (and parent) review workshops** conducted by Dr Ann Zubrick and Dr Gay Ward University of Notre Dame staff to triangulate my data and findings. These data (audio taped and notated) are cited as SR=Staff Review and the date (4/9/00). They are also described in the text.

- **Staff evaluations** were part of a professional development session in Term Four. The importance of these data necessitated that they were identified.
separately. Hence the format: teacher identification code, followed by E=evaluation and the date (21/11/00).

- **CD Roms and video tapes** of the parent forum summarizing research outcomes, (24/11/00).

- **Written copies of outcome summaries** presented to the whole school staff (14/11/00), School Council AGM (21/11/00) and a School Community Forum (24/11/00).


These original data are available as evidence “that the research was carried out systematically and could be the basis of an effective audit” (Bassey, 1999, p. 77). In addition, records of school policy and administration are available to verify the context in which this research was conducted. During times of data sharing, such as teacher workshops, participants were reminded that they could remain anonymous or provide personal anecdotes from their own experiences.

In the first school term of 2000, nine early childhood teachers became involved in the Language Development Project and participated for the entire school year. A tenth teacher returned from leave and chose to become involved for Terms 3 and 4 of the school year. As classroom language development plans were negotiated over four action research cycles, data were analysed continuously. Factors contributing to the development of co-constructive planning processes and influencing changes in participant thinking and pedagogy were documented and examined throughout the action research cycles.

The four action research cycles coincided with each of the four school terms. The iterative process of revisiting analytical statements with data and participants’ interpretations, was embedded in each cycle of observation, reflection, planned change and action (Wadsworth, 1997) during the data collection year.
Action research cycle one: Personal constructs and classroom practice

During the first four weeks of the school year, I requested that classroom teachers recommend times and schedules for my participant observations in their classrooms. I invited teachers to identify times that best represented their language teaching, inclusive of children with individual or group education plans. Initially this research was planned to probe teachers’ personal theories of language-based educational risk, characteristics of students identified as being at educational risk, language development practices selected and implemented by teachers for students at risk, and areas of need perceived by teachers in addressing language-based educational risk.

The classroom observation period coincided with the first four weeks of a new school year. All teachers were teaching new classes of students so this was an optimal time to observe and participate in the establishment of classroom policies and routines, as well as, to build relationships with individual students. Traditionally, teachers use these early weeks to note the individual learning strengths and needs of the children in their classes. In addition, I sought to establish personable working relationships with classroom teachers, mindful that the future of co-constructed language planning could be facilitated by positive working relationships in which all participants were valued. I was also aware that teachers needed time to become familiar with their students prior to reflecting on individuals’ strengths and needs, or language development plans, during initial interviews.

I explained my participant observation role (Wadsworth, 1997) as that of a skilled volunteer in the classroom. Teachers retained responsibility for all classroom decisions but were able to ask me to complete specified tasks. For example, teachers asked me to take reading groups and work with specified texts. All teachers were aware of my familiarity with classroom literacy teaching and learning. Simultaneously, I supported rather than challenged current teacher thinking and pedagogy. Spontaneous discussions about the personal constructs of early childhood language development, classroom language development practices or particular children at educational risk were welcomed and encouraged. However, I did not initiate such discussion as a participant observer. With a clear priority to establishing teacher-researcher relationships, I used the participant observer role to get to know
teachers and students. I also reflected on opportunities to facilitate the co-
construction of classroom language development planning, once working
relationships were established, and teachers and I had observed students’ strengths
and needs. The participant observer role did not include making judgements about
the effectiveness of teachers’ thinking and practice.

Another purpose of the participant observation time in classrooms was to understand
how teachers identified students at educational risk. As a participant observer I
attended to and recorded indicators of students’ educational risk during the first four
weeks of the school year. I compiled student profiles from classroom data such as
running records of reading (Clay, 2002) speech-language samples and written work
samples. During this participant observation time teachers were asked to consider
which students were at educational risk. Shared discussion of nominated students
moved the teachers and myself from a phase of initial observation on to reflections
about how to respond to students at risk. This shift from observation to reflection is
expected in action research.

**Initial interviews**

Each teacher also allocated a time for an individual interview. As discussed earlier,
teachers had been informed in 1999 about opportunities for involvement in this study
(2000). They were not asked to commit to the project until after we had shared initial
interviews and I had worked as a participant observer in their classrooms. The
purpose of this settling-in period was to allow teachers to sample engagement in a
teacher-researcher project, to ask questions and to contribute to shaping the initial
action research cycle.

Consent forms were discussed and signed during the initial interview session. As
classroom observation data and teachers’ reflections on personal constructs were
shared during initial interviews, teachers were able to provide informed consent at
two levels: (a) Consent to their future participation in the Language Development
Project, and (b) consent to data collected to date being retained and used in this
study. All teachers provided consent and were reminded that they could withdraw
their consent at any time during the project.
Initial interviews conducted during the first month of the school year were planned for several reasons. The main purpose was to confirm participants’ personal constructs of early childhood language development, language-based educational risk and the role of teachers in managing educational risk in classrooms. To this point, my observations of teachers’ classroom practice were interpreted as indicators of teachers’ thinking. Yet my observations and interpretations needed to be verified by teachers’ comments and reflections (Buchanan & Khamis, 1999) and by teacher-researcher dialogue specific to incidents of classroom practice and individual students.

The first indicator of a need to plan change came at this point. From classroom data I noted children at educational risk in each of the study classrooms. By contrast, most teachers were reluctant to nominate children at educational risk by the end of the first month of the school year. I needed to understand teachers’ hesitation to identify observable characteristics of educational risk and to move to explicit language planning accommodating students’ strengths and needs. Possible explanations for teachers’ hesitancy included their unfamiliarity with characteristics of educational risk, variation in their competencies to assess and document educational risk, variation in their confidence in their judgements of educational risk, absence of personal constructs of educational risk as significant in early childhood classrooms, or researcher misinterpretation of data to date. Hence, initial teacher interviews facilitated my move from a field research participant observer role in early childhood classrooms to an analysis and reflection role (Wadsworth, 1997).

Prepared questions facilitated individual interviews with participant teachers (see Appendix F). Interviews were semi-structured (Wadsworth, 1997) rather than centered on the sequence of prepared questions. Discussion focused on how teachers perceived their students, how they identified students at risk, their teaching role, and the type of support they believed would help them to meet the needs of such students.

I acknowledged that collaborative planning must be based on common understandings (Hart, 1992; Merritt & Culatta, 1998). DiMeo, Merritt and Culatta
(1998) believe that participants being attuned to one another’s beliefs and practices assists classroom collaboration. Wadsworth recommends that “strategically powerful questions” (1997, p. 39) engage research participants in a personal way. She suggests asking interviewees “how they feel about how things are now”; as well as, asking them to describe how they could be better supported. Since my intent was to understand each teacher, my observations and interpretations of language development practices, resources and specialist services for students at educational risk, were supplemented with discussion.

Wadsworth (1997) cautions researchers about being judged “to be too much at odds, too distant or not able to understand or respect” research participants. She believes that participants may withhold valuable information if the researcher is judged to be threatening, not to be like the participants, or unfair. Accordingly, I referred to my working discussion with classroom teachers as “collaboration” or “negotiation” during this study. Negotiation was the preferred term during the data collection year, used to emphasize continuous and shared decision-making with teachers. (The development and identification of co-constructed thinking and practice occurred as the action research cycles progressed.)

To understand how and why particular factors encouraged teachers to change, I considered ways to optimize working relations with class teachers by intentionally reducing conflict (Reilly, 1996). Conflict is reduced when people recognize their own beliefs and become aware of those of others. Since exchanges of self-insight and other-insight (Reilly, 1996; Ennis, Cothran & Loftus, 1997; Youniss, Noack & Hofer, 1995) are known to shape teacher–researcher relations, I asked teachers how they thought I (or others) could support their teaching of students at educational risk. I did not specifically ask them to report on current problems.

Teachers identified two ways in which their teaching could be supported. They requested detailed, diagnostic information about who was at educational risk and why. As a group, teachers were unsure about how to identify students at educational risk. They also requested practical support. They needed to see how the identification of language-based educational risk could be translated to in-class language development activities and strategies. Participant observation and interview data
confirmed variation amongst teachers. I had noted that teachers reported a range of understandings of educational risk and diverse personal constructs of the significance of educational risk in early childhood classrooms. Initial teacher interview data also verified a range of teacher competencies to assess and document educational risk. These data showed variation in teachers’ levels of confidence about their judgements of educational risk.

During initial teacher interviews, I encouraged each participant teacher to discuss their response to opportunities to negotiate classroom language development practices with me. In this way, I could begin to negotiate specific language development planning with teacher participants and to use social judgement theory to reinforce teachers’ right to accept, reject or remain neutral to my contributions. Four weeks into data collection, teacher interview and participant observation data supported my plan to “co-construct” language development plans with classroom teachers. More specifically, positive teacher-researcher interactions resulted in our plan to collate detailed oral and written language assessment data and to negotiate classroom language development plans for individual students.

**Detailed Oral and Written Language Data (OWLD)**

During the research proposal stage of this study (1999), I had formed a construct about the potential value of specialist language development data to classroom teachers. I considered how the provision of such information could influence teachers’ theory or practice about students at educational risk. I recognized that my collection and valuing of both clinical and classroom data to make diagnostic and critical decisions about individual students at language-based educational risk, influenced my construct formation. I believed that detailed, individual student oral and written language data could assist classroom teachers to plan and implement appropriate language teaching and learning practices for their early childhood students. I did not know how teachers would respond to such data.

I developed an Oral and Written Language Database 1 (OWLD1) as a way to share detailed language development information about students at risk. The OWLD is a twenty-point database of speech, language, hearing, literacy and learning style
characteristics, compiled using language observation and assessment practices from both speech pathology and education. The data were collected from classroom oral and written language samples and individual student assessments. The purpose of the OWLD was to combine objective and descriptive information for student profiles, to systematize data collection, and to provide a common database for co-constructing classroom language development plans.

The Oral and Written Language Database is referred to throughout this study. The abbreviations OWLD1, OWLD2, OWLD3, OWLD4, refer to the particular school term in which the data were compiled (eg. OWLD2 means data from school Term Two). The OWLD provided a cumulative record of individual student data over four school terms. The OWLD format of presentation was amended each school term in response to teacher and parent feedback on previous formats. The OWLD1 to OWLD4 summarize twenty points of oral and written language status for each of the thirty-three students at risk (also known as focus children) during this study.

The thirty-three focus children were each recommended for detailed oral and written language assessment by at least one participant teacher (including myself as a participant researcher). After compilation of the OWLD1 (Appendix G) for these students, the teachers negotiated whether or not they needed support to plan individual, small group or whole class language development tasks for these students.

From Term One, I analysed OWLD data and described students at educational risk within one of three student cohorts. My thinking was that these cohorts could assist classroom planning and support changes to teachers’ thinking and planning about students with language-based educational risk. The three cohorts were summarized as follows:

1. **Data Group One** included children with “general language weakness,” specified as receptive *and* expressive language difficulties. Children in data Group One were considered “at educational risk” as described by Bishop (1997), Catts (1994) and Rinaldi (2001).

2. **Data Group Two** included children with “skewed language profiles.” Group Two students evidenced diverse strengths and weaknesses with language
learning and using language to learn. These children were considered to have “some” language–based educational risk (usually receptive or expressive language issues).

3. **Data Group Three** included children who scored “within the range for age” on standardized language assessments but who displayed characteristics of language-based educational risk in the classroom. In the current study, these children were regarded as having “specific” educational risk.

Each cohort suggests a different view of language-based educational risk. In summary, Group One students were considered to have more “pervasive” educational risk (Catts, 1993, 1994) than children in Group Two. Group Two children were at greater risk than those in Group Three. The significance of each data group for co-constructive language planning was discussed with participant teachers throughout the study year.

The use of the OWLD format prompted my development of a two-part hypothesis as follows:

(a) Teachers’ understandings of specific speech-language-hearing impairment can be enhanced by the provision of detailed oral and written language assessment data; and

(b) Teachers’ understandings of detailed, individual student data assist them to better select and implement classroom language development strategies and practices for students at educational risk.

However, preliminary interactions with teachers challenged my thinking about this form of oral and written language data for early childhood teachers. I understood that my “data construct” resulted from my valuing, my development of, and my experience with, such explicit data forms. My hypothesis did not accommodate diverse personal constructs about links between assessment, monitoring, teaching and learning or the need for such data. Similarly, my construct and hypothesis failed to account for teachers’ disparate connections between OWLD data and personal constructs of language development, language teaching and the potential for change in early childhood pedagogy. Through sharing personal constructs about these issues, research participants confirmed that classroom and clinical language data
were potentially useful to classroom teachers and language clinicians. However, the routine provision of such data is not sufficiently attuned to the processes of adult decision-making. The principles of social judgement theory (Runner, 1999; Krebs, 1999) challenged the construct that “one method fits all”.

The compilation of OWLD1, to include teacher data, comprised six of the ten weeks of the first action research cycle. By the end of school Term One, participant teachers and I had used the OWLD1 to clarify which students would be our focus children for the co-construction of classroom language development plans. In addition, the compilation and review of the OWLD1 provided all research participants with a shared understanding about why we would focus on these thirty-three students at risk from the cohort of 230 early childhood students. The sharing of the three student cohorts was one way for participant teachers and myself to consider the homogeneity or diversity of students’ educational strengths and needs within each classroom.

Most importantly, the first action research cycle provided data about connections between personal constructs and classroom practices, and thereby refined the direction of inquiry. During the first research cycle teachers interpreted indicators of educational risk and reflected on the impact of language-based educational risk for classroom teaching and learning. In addition, I interpreted teachers’ responses to the OWLD and cohorts of students at educational risk. I had begun to interpret the extent to which teachers’ personal constructs of language-based educational risk shape and determine pedagogy for students at educational risk. I had also concluded that researching the value of one language tool, the OWLD, selected by me for teacher use, would be minimally useful. Instead, teachers had specified their request for diagnostic information to be interpreted in the contexts of their classrooms and translated to practical classroom tasks that they could implement or be supported to implement.

Cycle one data also confirmed the ways in which early childhood teachers identified, described and accounted for language-based educational risk. Preliminary connections were made between teachers’ confidence in their personal constructs of early childhood language development and their ability to identify focus children. Issues arising from data collated during the first action research cycle were rewritten
as analytical statements for further questioning, data matching, analysis and interpretation.

Bassey (1999) describes the process of using questions arising from qualitative research to formulate and respond to analytical statements. He perceives the researcher’s task as the unpacking of issues by cross-referencing data and analytical statements, collated from the study of a phenomenon of interest. Finally, the interaction between data and analysis is complete enough to substantiate empirical findings of a trustworthy nature. Barry (2002) regards the potential for multiple perspectives as one of the challenges of qualitative methodology. She recommends that researchers stop looking for one truth or fixed reality but “think of reality as being a dynamic concept that is re-constructed in negotiation with each of the informants to represent their own construction of their reality” (p. 32). By working with teachers in action research cycle one, I learnt that my construct of the potential usefulness of OWLD data did not match (most) teachers’ points of readiness as a tool for classroom planning specific to students at educational risk.

During the first action research cycle, the teachers and I had developed and used the OWLD1. We had reflected on the OWLD1 as a classroom planning tool and interpreted teachers’ feedback that this tool would be minimally useful without in-class application of the diagnostic information. Rather than continuing with “my” research, a constructivist interpretive approach to action research enabled the continuous negotiation of Language Development Project content with all of the early childhood teacher participants.

Consequently, we turned our research attention to the nuances of language content and the processes for negotiating and developing classroom language development plans. Our subsequent refining of this research focus through action research cycles two to four, is fundamental to understanding why this action research is later reported as a structured narrative, featuring four of the ten teacher participants. Our practical focus, and teachers’ priority remained the effective management of students with language-based educational risk in early childhood classrooms. The teacher stories in later chapters provide insights into what changed in these teachers’ thinking and classroom practice. Some description of the language development
strategies used by individual teachers is given. However, the more important research outcome is the development and justification of co-construction theory and practice.

In accepting this change in research focus from the use of diagnostic data in classroom planning to the co-construction of pedagogy for students at risk, I acknowledged teacher educators’ need to reflect upon factors influencing teacher decision-making, as well as, processes for classroom-based research. Teachers know what (and who) they are ready to engage with and why (Hall & Jones, 1976). Dick (1991) believes that “people are most likely to change when they believe a better option is needed, available, achievable, and consistent with their values” (p. 13).

I began to see an opportunity to research influences shaping early childhood teachers’ thought and pedagogy, from the teacher’s point of view. The possibility that research into the co-construction of language development plans could be used to “develop theory” and “enhance educational policy” (Bassey, 1999, p. xi) prompted further research questions. My plan to conduct this research across one school year remained. One school year would provide access to a range of data evidencing teachers’ planning and implementation for language development.

Although our regular co-constructive planning did not begin until the second action research cycle, I practised co-constructing thinking from the outset. For example, teachers were asked to comment on the speech, language, hearing, literacy, learning or behavioural characteristics of their students. I collated teachers’ spontaneous comments, questions and concerns about teaching and learning. As teachers contributed work samples, records and opinions to the OWLD1, we selected terminology that represented our common understandings of student strengths and needs for all participants. As recommended by Broadley et al. (2000), I believed that “Answers provided by research need to be in a form teachers can readily identify as relevant to their style and context” (p. 138).

As we moved to co-constructive language development planning with the second action research cycle, I followed Bassey’s (1999) recommendations for organizing qualitative educational research. I needed to refine the focus of this research, from my predication that OWLD could assist teachers’ classroom planning; to focus on
teachers’ requests for the translation of diagnostic data to practical tasks. I returned to the research questions (as presented in Chapter 1) to match data to research questions, marking issues arising for future analyses and sectioning transcripts into data items. The cyclic process of questions, field research, analysis and reflection, conclusions, recommendations for action, action (and so on) was replicated in each of the four research cycles and linked to trustworthiness indicators. Questions and continuous analysis focused the research on the phenomenon of interest in this thesis: the factors influencing change in early childhood teachers’ language development practices. Although subsequent action research cycles overlap in content and process, each cycle is described separately here to maintain clarity and to ensure thorough reporting.

**Action research cycle two: Negotiated thinking & pedagogy**

A commitment to listening to informants includes a preparedness to change researcher thinking and practice as required (Barry, 2002). At the beginning of Term Two, I could observe and interpret but not know teachers’ individual needs for co-constructive language planning. Research into teacher thinking indicates that teachers may not know what their thoughts and needs are until they are encouraged to articulate them (Batten & Marland, 1993). As the teachers and I worked together to select and plan classroom language development practices, teachers were encouraged to reflect on and articulate their support needs, and to suggest the content and processes for shared planning.

School Term Two began with teachers and myself working together to select and plan classroom practices for students at risk. We planned specified activities and strategies for whole classes, small groups or individual education plans within the English Learning Area. The West Australian *Curriculum Framework* (Curriculum Council, 1998) English Learning Area includes speaking & listening, reading, writing (including spelling) and viewing. Substrands of the English learning Area are: use of texts, contextual understandings, processes & strategies and conventions. Oral and written language are used in all other Learning areas.
The teachers and I negotiated who would teach planned activities, when and why. Procedures for monitoring student outcomes and for reviewing the selection and implementation of language development activities were also negotiated. Regular opportunities for teacher-researcher discussion and continued shared classroom time were critical to the action research process.

Calderhead (1984) explains how the process of gathering and interpreting empirical evidence of teachers’ thinking and decision-making, is a way of “conceptualising teachers’ practice... revealing the kinds of knowledge teachers have acquired, the interpretations they make of classroom events and how these guide teachers’ actions” (p. 120). I observed, interpreted and verified (through documented dialogue) teachers’ thoughts and pedagogy. Action research cycle two was an attempt to elicit “detailed knowledge and understanding of the lived experience” of early childhood teachers (McAllister, 2002, p. 23). These data were used to systematically plan improvements in pedagogy with, rather than for, teachers.

I facilitated co-constructed planning during the second action research cycle. Rather than assume the planning needs of individual teachers, co-construction required me to interpret each teacher’s point of view. In other words to:

get inside the heads of the practitioners, to see the world as they see it, then to understand the manner in which (teachers) construct their problem spaces, their definitions of the situation, thus permitting them to act as they do (Shulman, 1987, p. 375).

Understanding teachers’ actions and reactions from their perspective in the classroom meant that I had to attend to variations in individual teachers’ data to understand links between personal constructs and classroom actions. One purpose of co-construction was to get close to teachers’ personal constructs of early childhood language development and to track processes and influences of changes in constructs and pedagogy. In this way, the teachers and I shared membership of the learning community (Buchanan & Khamis, 1999). Teachers learned by reflecting on factors influencing language plans, analysing the content, and developing processes of co-construction that worked for them. I sought to give teachers a sense of ownership and
to empower them to become facilitators of change in their own teaching (Buchanan & Khamis, 1999, p. 11). Teachers could build knowledge and experiences in the context of their classrooms through our co-constructed planning, co-teaching, observing, monitoring and reviewing of classroom practice.

Although the primary purpose of action research cycle two was co-constructing classroom language plans, I continued to collect data about the influence of explicit diagnostic student data on teachers’ classroom decision-making. During school Term Two, I collected audiometric data to update students’ oral and written language profiles, now known as OWLD2 (Appendix H). The addition of otoscopic, tympanometric, and standard air conduction hearing assessment data (Clezy, Stokes, Whitehill, & Zubrick, 1996) for each focus child, updated the OWLD1 to the OWLD2 during the second action research cycle. Again, students were assigned to one of three cohorts. Data Group One included children with audiometric profiles outside the expected range. Data Group Two included children with audiometric profiles suggestive of fluctuating middle-ear status and fluctuating hearing levels. Data Group Three included children whose audiometric profiles were within normal limits when sampled. A description of educational risk based on the OWLD1 and OWLD2 cohorts, was documented for each focus child.

In addition, co-constructed plans were documented and actual classroom practices recorded to monitor changes to planned activities. These data provided a basis for reflection and further planning, as well as, being useful for the tracking of changes in thinking or planning. At the end of Term Two, I requested teachers’ written reflections and opinions of the Language Development Project. Teachers were invited to recommend changes both to the content and process of co-constructed planning for the next school term.

By the end of the second school term, I was beginning to analyse and interpret data relevant to the second research question, Which influential factors shape early childhood teachers’ thoughts and pedagogy for students at educational risk? Descriptive data was used to suggest the extent to which co-construction was shaping teachers’ thinking and classroom practice. Data analyses and interpretations offered preliminary explanations of influential factors. However, further systematic and
critical enquiry was required to understand teachers’ receptivity or resistance to change in practice. I sought to understand how further opportunities to co-construct language development plans with classroom teachers would influence change in teachers’ thought and pedagogy. In action research cycle three we reviewed and refined co-construction processes and outcomes, and confirmed the importance of factors emerging as influential in change.

**Action research cycle three: Refining co-construction**

The third action research cycle began at the beginning of school Term Three using practices similar to those described in action research cycle two. The simultaneous analysis of Term Three data illustrated subtle further changes in teachers’ practices, as well as, their personal constructs of language development and language-based educational risk. Furthermore, I revisited the issue of changes in teachers’ confidence to make decisions about risk. Most teachers had been reluctant to nominate children at educational risk for co-constructed planning early in Term One. During Term Three some teachers requested my support to become more independent and competent in identifying and responding to their students at risk. From the teachers’ point of view, the third action research cycle further addressed teachers’ needs for practical support. My focus was on the importance of teachers’ feedback and the development of teachers’ “voice” as an influential factor in effective co-construction.

Until the third school term, teachers’ feedback was predominantly related to the value and impact of oral and written language data provided for individual students. Such data confirmed the importance of teachers’ personal constructs since teachers gave diverse responses to OWLD1 and OWLD2. Some teachers found OWLD1 too detailed and difficult to process. Others reported the level of detail in the OWLD1 and OWLD2 to be most useful in understanding the unique needs of their students.

Together, the teachers and I agreed that additional oral and written language data would be collected and used to assist classroom language planning. Further assessments of phonological abilities (Muter, Hulme & Snowling, 1997; Vardi, 1991), central auditory processing (Keith, 2000) and Literacy Net (Education Department of Western Australia, 1999) were completed for some focus children, as
OWLD3 (Appendix I). The decision to further assess individual children was determined by the language planning needs of the child’s teacher or myself.

The teachers and I also agreed that most participants found other factors to be more influential (than the OWLD) in changing teacher thought and pedagogy. This reflection and planning was very significant to the third and fourth action research cycles because it was the point at which many teachers demonstrated an expectation and willingness to influence the content and process of co-constructed language development plans.

The third cycle included a variety of language development practices, planned by teacher-researcher dyads, and an increase in teachers’ understandings of their opportunities to shape co-construction. Teachers acted to ensure that this study and the specifics of action research cycles met their particular teaching-learning needs. I regarded action research cycle three as an opportunity to improve the match between teachers’ needs and action research, and to demonstrate that teachers’ feedback was influential in shaping co-construction. One example is my provision of professional development sessions for teachers, as a response to their expressed needs. We were able to discuss and review our interpretations of OWLD data to date.

Well before school Term Three, every teacher had provided data about their personal constructs of early childhood language development and their responses to language-based educational risk. However, the process of linking teachers’ personal constructs and classroom language development practices was complex. As expected, teachers’ constructs and practices were changing as an outcome of the action research design. My remaining task was to interpret influential factors in change and to consider the potential of co-construction theory and practice. I began to consider the benefits of an integrated and structured narrative to report this action research from my perspective as a participant researcher, and as a way to include the teachers’ voice.

In order to preserve teachers’ meanings as accurately as possible, classroom data were recorded and collected in the format used by teachers (notes and conversations for example). In addition I recorded my interpretations of teachers’ thoughts and pedagogies, and my perceptions of changes in their thinking and practice, in a
research diary (dated with teacher identification codes added). Diary entries were verified by teacher-researcher dialogue. Throughout, teacher voice was critical in interpreting classroom events. Hence, I considered structured teacher narratives as a way to accurately report the nuances of individual teacher voices on co-construction.

I reviewed Fehring’s (1999) use of participant observation, interviews and case study method to “analyse the teaching act, teachers’ attitudes, values and belief systems... to understand the underlying rationale of what is a complex form of human behaviour” (p. 41). Like my research, Fehring’s (1999) work examined influences on teacher judgements. She included teachers’ perspectives when studying teachers’ judgements of students’ literacy development in Victorian schools. She analysed the judgements of three teachers in three schools. Fehring’s reference to recognition of “teacher’s voice” or “teacher’s frame of reference” (pp. 39-40) matches the intentional inclusion of teachers’ opinions, perspectives, judgements and interpretations in this research. Fehring’s work influenced my reporting of this study in which the ten teachers and I were all participant researchers.

Fehring (1999) purposefully selected incidents from her three teachers data and reported her findings as a collective case study. In my study, further analysis and revisiting of teachers’ personal language constructs, challenged me to purposefully select incidents as Fehring had done. I made the judgement that detailed reporting on every teacher’s experience of this action research would not strengthen my research conclusions. Rather, a representation of the diversity of teachers’ participation and interpretations of co-construction processes would support my data interpretations, research generalizations and conclusions. I decided to highlight incidents involving individual teachers who, because of their diverse responses to this action research, had the greatest impact on my learning and research findings. Data collected during action research cycle three was particularly useful because, by this stage, research participants had experienced, influenced and reflected on the development of our co-constructed processes.

McAllister (2002) reminds researchers that every item of data potentially strengthens, challenges or adds an alternative emphasis to reported research outcomes. However, explaining the specifics of teachers’ decisions, given the
The challenge, with all of the teachers, was in accessing their knowledge about their classroom practice. Much of this knowledge, of value to educational researchers, “resides in the minds of teachers and cannot be easily accessed. Moreover, part of it is tacit, hence teachers cannot say what they know because they do not always know what they know.” (Batten & Marland, 1993, p. 67). In the current study, I intentionally explored the co-construction of language development practices as a way of making participants’ tacit knowledge explicit. My belief was that sharing personal constructs of language development practices makes them more explicit to oneself and to others. Co-construction facilitates transformations in explicit thinking from teachers’ previous classroom experiences, beliefs, theories and observations to future language development practices. It also aims to make explicit the underlying constructs and reasons for teachers’ classroom actions.

The intentional use of co-constructive language planning processes as part of participatory action research is well supported. Sabar’s (1994) review of the work of Connelly and Clandinin (1986) attests that the highest form of teacher-thinking research is when teachers and researchers together construct knowledge. The need to address teachers’ awareness of teaching-learning content and of their thinking processes, is also supported. For example, Carlgren, Handal and Vaage (1994) propose the active involvement of teachers in educational research so that
“knowledge about teachers’ knowledge” is not “imposed on teachers as their knowledge” (p. 4).

In addition to action research cycles and on-going analyses of gathered data, teacher voice was paramount in Term Three. The involvement of third-party researchers (university staff other than myself) was a means of triangulating data and substantiating my interpretations of data to date. Teachers were invited to share their opinions and reflections with the reviewers during a staff workshop. Triangulating changes in teacher thinking and classroom practice allowed data to be matched to analytical statements and interpreted within and beyond the study context. Indeed, data collected during the third action research cycle added depth to data collated previously. Questions and issues arising earlier could be re-examined with Term Three data.

**Action research cycle four: Teacher voice**

The continuous participation of teachers through one school year of action research elicited an extensive database. Factors emerging as influential in action research cycles one, two and three were revisited in research cycle four. Anomalies and consistencies among teacher data, compiled during the year, enhanced teacher reflections during research cycle four. Throughout, teachers’ interpretations, and my own, were used to verify empirically based findings about the co-construction of change in participants’ thought and pedagogy.

During school Term Four, action research processes refocused this study to observation and reflection components of the cycle, rather than planning immediate changes or acting on those changes (Wadsworth, 1997). During the first five weeks of the school term, I continued to co-construct language development plans as requested by classroom teachers. In addition, teachers were invited to predict their responses to students with language-based educational risk in their early childhood classrooms in future years. They were also asked to reflect on factors that had influenced or constrained their responses (Calderhead, 1984) to the Language Development Project during the school year.
Final individual interviews with teachers and a group teacher meeting during Term Four further enriched action research data. Teachers participated in individual interviews to discuss their reflections and interpretations of the LDP over the year. Final interviews included the sharing of updated student summaries, the OWLD4, that provided summary information about students’ educational risk status at the end of the 2000 school year. The OWLD4 was presented as a bar graph (Appendix J), unlike the descriptive formats of the OWLD1, OWLD2 and OWLD3.

Teachers’ responses to student data contributed a further sample of teachers’ thinking about early childhood language development and language-based educational risk. In later chapters, I reflect on how (and why) teachers’ thinking and classroom practice for students at risk changed as an outcome of co-construction. Teachers’ perceptions of the permanency of co-constructed change and their awareness of influential factors in the co-construction process are also discussed.

The final teacher meeting in Term Four, provided staff with the opportunity to discuss research outcomes as a group. The provision of individual interview and whole staff forums for teacher reflection was my response to the knowledge that teachers had personal preferences for expressing their opinions in dyads or groups. Data relating to the content and process of the LDP and suggestions for future change were elicited in this way. The Term Four data, elicited from ten teacher participants, verified interpretations formed during the year. Subsequent data analysis supported my final generalizations about the impact and potential of co-construction processes as a way to effect change in teacher thought and pedagogy.

Action research methods facilitated the layering and revisiting of data during the research year. Bassey (1999) explains how research questions elicit raw data, which become data items with locatable references. Draft analytical statements are then compared with data items and changed or eliminated as appropriate. This cyclical process continues until data analysis links have been thoroughly investigated and presented as empirical findings. Dick (1993) explains, “each turn of the action research spiral builds on the understanding at the previous turn” (p. 16). He identifies “the responsiveness to the situation, and the striving after real understanding” (ibid) as the two features that define action research as a useful research strategy. Using
these processes, data items and analytical statements in the current research are reported as trustworthy generalizations.

Wadsworth (1997) also recommends mapping iterative processes to action research cycles so that research is continuous. This recommendation was followed in the current study, as the three research questions were refined to direct action research processes and guide this exploration of co-construction with teachers. First, the examination of connections between personal constructs and classroom practice led to an exploration of factors influencing change in thought and pedagogy. In turn, the implications of co-construction as a way to effect change in teacher thought and pedagogy were discussed and interpreted with teachers. As stated by Fehring (1999), “understanding what influences teachers’ judgemental processes should precede and then facilitate change of any kind” (Fehring, 1999, p. 40).

Here, action research processes facilitated the layering and revisiting of links between data and analysis in another way. The formation of draft analytical statements and comparison with data required that analytical statements were substantiated, revised or replaced as indicated by the data. Continuous data analyses verified unusual or atypical data from cumulative constructivist interpretations. Inconsistent data could be further investigated. These processes helped to establish the limits of generalizability (Davidson & McAllister, 2002) of this study.

Term Four reflections were particularly important as a way to verify the teachers’ voices in the later structured narrative. The iterative processes used as a precursor to that narrative are summarized as Stages 4 through 7 of the Language Development Project. An alternative, graphical representation of changes to the focus of the four action research cycles of the Language Development Project is given in Appendix K.

**Stage 4: Generating and testing analytical statements**

The fourth research stage involved the generating and testing of analytical statements. Although preliminary data analysis and organization of data occurred during action research cycles, the formulation of analytical statements from research data provided concise answers to the research questions. Bassey (1999) accepts that
“other researchers using the same data might come up with different constructs for basing the analysis on” (p. 71). Given this possibility, Bassey recommends that researchers continue the iterative process of analysis and data testing until they are confident that the analytical statements are trustworthy.

During the fourth cycle of this action research, I drafted analytical statements to amend, reject or accept after rigorous comparison with coded data. The summary of the action research cycles above, indicates that the first research cycle addressed the first research question, the second and third research cycles focused on the second question and the fourth research cycle was most relevant to the third research question. The processes of reviewing and refining original questions during the action research and data analyses were important to study outcomes. For example, the matching of data to analytical statements often generated subsidiary questions. When this occurred, data needed to be reviewed (or additional data sought) to answer subsidiary and key questions. These iterative processes and outcomes are detailed in the teacher stories in chapters four through seven.

**Stage 5: Interpreting analytical statements**

Once analytical statements have been generated, they need to be tested against data prior to the interpretation or explanation of research findings. Bassey (1999) suggests that some interpretations are unique to individual research participants, others are common to groups of people, and others imply cause-and-effect relationships. Given my research purpose, to interpret the potential and limitations of co-constructed language planning; I used teachers’ voices to explain a range of responses to co-construction opportunities. I added my researcher voice to draw together multiple interpretations of the development of co-construction processes in early childhood classrooms, to relate research findings to available psychological theory (as outlined in Chapter 1), and to formulate answers to research questions. The gradual interpretation of links between data and analytical statements was like building a scaffold from which co-construction processes could be reflected upon and understood.
Here, my use of a constructivist interpretive paradigm demonstrates my intention “to elicit what different actors seem to be doing and think is happening,” in order to analyse and interpret data (Bassey, 1999, p. 44). In quantitative research the researcher’s involvement is intentionally objective and the reciprocal influence of researcher and “subjects” is minimized if not eliminated (McAllister, 2002, p. 22). By contrast, qualitative researchers acknowledge the possibility of influencing a phenomenon or being influenced by it, as part of the research process. In the current research, the teachers and I continuously planned, acted, observed and reflected on our classroom language development practices as a means to interpreting influential factors in that co-construction. Research participants expected to influence, and learn with, one another.

**Stage 6: Deciding on outcomes and writing the report**

Through this study, I intended to report on effective processes by which classroom teachers’ and language specialists’ experience reciprocal learning, as they share decision-making. To do so, I needed to be immersed in, co-construct and interpret classroom language development practices for students at educational risk, or whole classes. However, as this research developed, I recognized the opportunity to report also on co-construction theory, developing from co-constructed classroom practice. The purpose of this final research report is to specify and critique co-construction theory and practice as an innovative approach to teacher change.

In Chapters 4 through 7, participant teacher stories and my researcher perspectives are interwoven to one structured narrative. The stories of four of the ten teachers are reported in detail because their telling enhanced my understanding of (and readers’ access to) eventual research generalizations. I argue that the careful selection of teacher data better represents research findings than would the reporting of common outcomes for all participants. I report commonalities in data or research outcomes from the other six teachers when such reporting contributes to the understanding of co-construction processes.

Batten and Marland (1993) might challenge this rationale for action research reporting. These authors studied teachers’ knowledge of their teaching craft and
recommended that educational researchers look beyond interesting individuals to the group to develop generalizations. However, I believe their suggestion does not apply directly to the current study because I am examining processes influencing teachers’ active learning and changes to their subsequent teaching. This study of teachers as active learners, engaged in pedagogical change, is not the same as Batten and Marland’s generalization of teachers’ knowledge about teaching.

The possible use of repertory grids to represent participant teachers’ personal constructs also needs acknowledgement. In Chapter 5, I explain why and how I have organized teachers’ construct data without using repertory grids. Essentially, I was interested in how teachers influenced, and were influenced by co-construction processes. The tabulation of teacher data in a repertory grid would highlight commonalities. It is possible to tabulate data to show that all teachers engaged in the co-construction process through one year of action research. However, my research interest concerns how and why co-construction processes (the ‘template’) needed to be modified for individual teachers. Summarizing the personal constructs held by this group of teacher participants, as with a repertory grid, is unlikely to enhance the understanding of effective co-construction processes.

Alternatively, my selective use of four teachers’ data, with some reference to the other teacher participants, builds the case for co-construction as a flexible, interactive learning process that must be personalized for each participating teacher. The structured narrative in the following chapters illustrates the development of co-construction theory and practice from the point of view of classroom teachers and includes my participant researcher learning. Based on study data, analytical statements and iterative processes, these chapters satisfy Bassey’s (1999) research purpose, “to advance knowledge by describing and interpreting the phenomena of the world in attempts to get shared meanings with others” (p. 44).

In the concluding chapter, I draw together insights gained from this research. I reflect on the importance of particular research processes for producing actual research outcomes, and reiterate the potential of co-construction for effecting pedagogical change in schools. The future development of co-construction (its theory and practice) relies on the use and constructive criticism of ideas presented here, in other
educational contexts. Further research reports will influence the refinement, rejection or acceptance of co-construction as a way to effect change in teacher thinking and pedagogy.

Stage 7: Finishing and publishing

As recommended by Bassey (1999) I have organized the documentation of this action research at three levels. The archive is the complete set of teacher, student and parent data such as audiotapes, work samples, planning notes and classroom records, collated during this action research and listed earlier in this chapter. The working documents are those analysed and selected for inclusion in this final report. Data from focus teachers, Penny, Toni, Jacqui and Maree are considered to be essential working documents in this research. They are supplemented by supporting data from other teachers. The OWLD were constantly referred to when co-constructing plans with teachers. They are referenced, as appropriate throughout this thesis. The thesis is the end point of the research. It includes selected citations from original data, interpretations of these and explanations of connections between original data and research conclusions.

The work of Perry (1995) and Perry and Zuber-Skerritt (1992) assisted my writing of this thesis. These authors distinguish between the conducting of action research and the process of completing an action research thesis at doctoral level. They use examples from graduate management research programs and from education, motivated by the relative usefulness of action research findings to contexts where research is participatory, collaborative and change is an expected outcome. Their work has encouraged the finishing and publication of this action research thesis at a time when the research literature appears “to ignore the complexity of presenting action research in a format required for a Masters or PhD thesis” (Perry & Zuber-Skerritt, 1992, p. 207).

Bassey (1999) states that the purpose of systematic documentation is always “to ensure that the researcher can work effectively within the ethic of trustworthiness and the ethic of respect for persons” (p. 80). Such was the intent and process within this study. Indeed, “It is through the documentation and publication of the research
that the researcher is publicly accountable for the rationale, conduct and interpretation of findings” (Ferguson and Mortensen, 2002, p. 55). There are many benefits of research-based professional discourse but “it is only when we can explain our work in lay terms that we really clarify its relevance to society” (ibid).

This research has been presented to academic and lay audiences, as outlined in Appendix L. In addition, Bassey (1999) advises regular contact with a critical friend “who plays the devil’s advocate in questioning the research process and outcomes” (p.76). In this case, the benefits of supervised research are highlighted. Despite attempts to use critical friends from the school community, the inconvenience of distance and the limited availability of research expertise in rural communities resulted in my relying upon university associates and critical friends from other centres to critique this research.

One benefit of the rural community in which this research was conducted is that many community members were directly or indirectly involved in the research processes. At regular, albeit unplanned intervals, I was required to explain and substantiate developing research methods and research outcomes as part of my interaction with community members. Wadsworth (1997) and Broadley et al. (2002) value such opportunities as another way to bring research to real contexts and because reporting to the broader community requires researchers to use formats that make sense to their audience. In this way, members of the rural community acted as critical friends with particular interest in the research context and implications for their future.

**Principles of trustworthiness**

Bassey (1999) recommends that researchers ask and answer questions about their respect for truth and persons in reviewing their research processes and subsequent reporting. These questions were useful before, during and after this qualitative inquiry. For example, the question, “Is the account of the research sufficiently detailed to give the researcher confidence in the findings?” (p. 76) was useful when making decisions about the balance between saying too much and too little in qualitative reporting. My rationale for focusing on four of the ten teacher stories
(Jacqui, Penny, Toni and Maree) is based on my judgement that these four teacher voices most informed the research outcomes. I am confident about the importance of these data to research findings. Data from Jacqui, Penny, Toni and Maree are extensive and sufficiently detailed to be linked to analytical statements and interpreted. My focused reporting on these four teachers reflects the importance of their data to research findings. This was not a random selection because ten teacher narratives would have made this thesis unnecessarily lengthy.

Practical ways of ensuring trustworthy use of teachers’ data punctuated this study. All teacher participants gave informed consent. Purposes and procedures were described prior to data collection, data was continuously reviewed with teacher participants during the research cycles and individuals could withdraw their consent to data use during the study. Regular procedures for inviting teacher verification of data were an essential part of this constructivist interpretative study.

The systematic organization of iterative research procedures with participant teachers was another way to establish the trustworthiness of research findings. Dick (1993) discusses the trade-off between replicability and responsiveness in action research. He states, “Action research values responsiveness over replicability, because otherwise it is very difficult to achieve action as part of the research” (p. 38). My intent was to make research processes transparent for reviewers. I needed to show that participatory action research was the best methodological choice for this research. Here, I needed to do more than track change in teachers’ thinking and practice. I needed to understand and explain influential factors in change, from participant teachers and a researcher point of view. Constructivist interpretive processes within action research cycles enabled the gathering and reporting of appropriate and trustworthy data.

Techniques to ensure respect for the truth and persons are mentioned throughout this summary of the seven stages of this research. In addition to Bassey’s (1999) questions, Fehring’s (1999) trustworthiness criteria of credibility, transferability, dependability and confirmability were used as practical checks throughout. Principles of trustworthiness are detailed with the presentation of original data in
chapters four through seven as links between data collection, trustworthy data analysis, interpretation and research publication are specified.

Innovative educational policy and practice, at the local or global level cannot be accepted without systematic and acceptable research method. The implications for co-constructive classroom language planning in other schools rely on the quality and rigour of this original research.

**Summary**

This chapter on the methodology used to conduct the Language Development Project is a response to the call for legitimate, rigorous and explicit research frameworks (Dick, 1993). I have described each of the four action research cycles to show how and why teacher data were collated, analysed and interpreted in early childhood classrooms during the study year. My intentional use of participatory action research reiterates the importance of revising and refocusing research questions during qualitative research. I also emphasize the need to selectively report qualitative data and to deal with anomalies in teachers’ data when drawing research generalizations.

In the next chapter, I use Term One data to address research question one. Subsequent chapters are dedicated to further data analysis and interpretation. In this way, the story of co-construction unfolds as a way of effecting change in teacher thought and pedagogy.
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 respectively¹. 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 (T1P5D1142). 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’ (T1P5D119-20).

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 (T2TD134-40). 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 (T2TD1181; T2TD1185). 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 (T2T9D134-35). 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 (T2T9D138-40).
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 (TKJD1I-2; TKJD1I24). 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.
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 ongoing 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 (T1P5DI15-8)
- 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.
Chapter 5

Personalizing content and processes in co-constructed language planning

“You can’t make anyone DO anything if it doesn’t match their life values”
(Bussell, 2002)

Introduction

In this chapter, the co-construction story continues from the beginning of the second action research cycle. Documentation of teacher-researcher interactions during school Term One had provided baseline data for decision-making and actions for research cycle two. For the second research cycle we refocused our attention from gathering diagnostic data about students at risk, to co-constructing classroom language development plans for them.

As co-construction began for school Term Two, I began to intentionally interrogate data against the second research question, *Which influential factors shape early childhood teachers’ thoughts and pedagogy for students at educational risk?* In this chapter, the narrative details how teachers’ input to co-constructed practice shaped the content and processes of our learning. The redefining of the second research question as two subsidiary questions and a further six Analytical Statements, guides this retelling.

By the beginning of school Term Three, pre-requisites and influential factors in effective co-construction were emerging. Here, these features are reshaped as general characteristics of co-construction. I continue to weave data, iterative processes, available theory and constructivist interpretive thinking to describe participants’ learning about co-construction. There is an effect of data layering here. Term Two learning directed us to refine and improve co-construction during Term Three. Our
learning about effective co-construction, substantiated here by teacher stories, is summarized as a template of co-construction for future use.

Throughout the second and third action research cycles, particular research attention was given to the importance of teacher input and problem-solving through episodes of teacher-researcher dysfunction. Revisiting data for the writing of this narrative provided further opportunities for comparing data with personal construct and social judgement theory, for theorizing about transitions in teachers’ constructs and practice and for decision-making about the selection and reporting of teachers’ constructs and classroom stories. Each of these issues is discussed.

Teacher stories from Jacqui, Penny and Toni continue on from Term One data. A fourth teacher, Maree is brought into the narrative to demonstrate how we learnt about reconstruction. Another teacher, Coral, is introduced for this chapter, to add insightful data about teachers’ self-perceptions and transitions in constructs and practice.

This chapter builds the story of co-construction towards conflict, and some resolution. We hear of teachers embracing co-construction with the hope that they can better meet the needs of their students at educational risk. My retelling is edged with a memory of responsibility and trust; teachers had shared their personal constructs of educational risk with me, and welcomed me to their classrooms. I recall my optimism as I acknowledged the principles of social judgement theory. I believed that connecting classroom practice to one’s life values, constructs and prior experiences would encourage teachers to engage in co-constructed change.

This chapter is more than a retelling of how I invited and supported teachers to influence their own thinking and practice. This is about researchers and teachers accepting and valuing reciprocal contributions to effectively select, design and co-construct language development practices in early childhood classrooms. A central theme emerges here, based on data from all participating teachers, and remaining throughout the narrative. “Co-construction doesn’t just happen.” Facilitators need to value all participants and personalize co-constructive language development planning to the constructs, strengths and needs of individual teachers.
Research questions and analytical statements

Research question two concerns the extent to which early childhood teachers’ personal constructs of educational risk and their classroom practice can be shaped through the co-construction of language development plans. Two subsidiary questions were framed:

1. Which aspects of teachers’ personal constructs of language-based educational risk can be positively influenced through co-constructive planning?
2. To what extent does the co-construction of classroom language development plans influence early childhood teachers’ classroom practice?

These subsidiary questions gave rise to analytical statements that were used to organize and make sense of Term Two and Term Three data. The analytical statements examined in this chapter all relate to the potential of co-constructive language development planning to shape teacher thinking and practice. More specifically, co-constructive processes are thought to facilitate six outcomes.

Co-constructive language development planning can:

- enhance the significance of language components in teachers’ personal constructs of educational risk. Analytical Statement 8 (AS8)
- shape the specificity of oral and written language links in teachers’ personal constructs of educational risk. Analytical Statement 9 (AS9)
- shape teachers’ understandings of oral and written language profiles (OWLD) as part of their personal constructs of educational risk. Analytical Statement 10 (AS10)
- facilitate teachers’ independent use of explicit language development practices in response to educational risk. Analytical Statement 12 (AS12)
- shape teachers’ confidence in selecting and implementing classroom language development practices in response to students at educational risk. Analytical Statement 13 (AS13)
Reflecting on co-construction

During Term One I had explored teachers’ personal constructs of (language-based) educational risk. I had used the OWLD1 to ascertain the influence of detailed diagnostic information about children’s characteristics of risk, on pedagogy. Simultaneously, I identified occasions when some teachers’ classroom language development practices could be supplemented with additional and different explicit language teaching and learning tasks, in response to their students at educational risk (CBRD14/3/00; CBRD21/3/00). Although the OWLD1 had been minimally useful for effecting change in teachers’ classroom practice, I hypothesized that the detailed profiles of students’ learning strengths and needs could be systematically matched to classroom language development practices through co-constructed planning processes.

Recall that all teachers acknowledged the possible co-occurrence of educational risk and language difficulties but only Penny focused on oral-written language interactions as causative or predictive of educational outcomes. Penny had identified a need to further her understanding of the interaction between oral and written language. She was very receptive to co-constructed language planning opportunities, requesting planning times to do so (for example, T1P22/6/00). This next stage of Penny’s story illustrates how the shaping of personal constructs and classroom language development practices facilitated her confident identification and response to students’ educational needs.

In Term One, Toni had offered numerous examples of ways that she currently responded to educational risk but referred to her lack of experience teaching in the early childhood years and her perceived need to develop appropriate classroom practices (CBRD18/2/00, CBRD28/2/00, CBRD30/3/00). She invited co-constructed language development opportunities. Jacqui had welcomed co-constructed language planning opportunities with a strong preference for classroom-based early childhood language support (TKJD148-55). In this chapter we see how Jacqui’s personal beliefs continued to shape the goals and schedules of the classroom-based language support program for her students.
From Term One and the selection of diverse teacher stories, to show the array of teachers’ personal constructs of educational risk and classroom practice; a commonality in teacher data now emerges. All of the stories shared in this chapter show how and why teachers judged the content and processes of co-construction as “appropriate and acceptable” (or not) for themselves. As suggested by social judgement theory, co-constructive processes can shape teachers’ thinking and classroom practice if they are considered to be appropriate and acceptable to the participants involved.

Current research (Clark, 1992; Fullan, 1996; Hargreaves & Fullan, 1992; Thiessen, 1992) explains why teachers’ perceptions of available teacher support systems are critical when planning and implementing staff development and school change procedures. A school administrator recently referred to the acceptance or rejection of school-based support services for teachers. He said of literacy success in his early childhood classes, “You can’t make anyone DO anything if it doesn’t match their life values” (Bussell, 2002).

Theoretically, co-constructive planning processes would enable teachers and language specialists to adjust their lenses of personal belief, experience and practice in order to accept, reject or ignore opportunities for change in their thinking or classroom practice. Metaphorically, each lens of personal thought and practice could be better focused, given a deeper depth of field or a wider angle. With adjustment of their lenses, users would better see classroom language development practices as explicit language learning and language teaching opportunities for children at risk. In this study, teachers’ personal lenses would determine which co-constructed changes were acceptable and appropriate for use in their classrooms. My personal lens would determine the extent to which co-constructed, explicit language development practices accorded with available child language theory and practice. Furthermore, each personal lens could determine individual contributions to the content and processes of co-construction.

The analogy of the camera lens highlights how co-constructive processes assist two (or more) people to work together to produce “better images” of professional thinking and practice. Co-construction is a way for teachers and researchers first to
share and then to sharpen their views of explicit changes in thinking and/or practice in response to classroom issues. Sharpening one’s view by adjusting the focus is analogous to teachers and researchers planning together to identify an issue or consider contributing factors and various practical strategies, prior to actually selecting and implementing explicit language development activities in the classroom. The details of how far and how often the focus needs adjustment, provides an analogy for the potential change in thinking or practice experienced by both teachers and researchers, over time.

**Teachers’ input to co-constructed language development practices**

Term Two and Three data show how our views of educational risk and classroom language development practice changed during the research year. The extent and process of change in thinking and practice was unique to each teacher. It is not appropriate to compare and contrast the strategies used by individual teachers at any point in this action research because strategy use is dependent on so many factors (the strengths and needs of students, class size, physical arrangements of the class, year level of the students, prior experience of the teachers etc.)

Hall and Jones (1976) argue that one cannot correlate teaching competencies with effective teaching because “effective teaching involves different behaviours for different teachers with different kinds of students” (p. 26). My task was not to compare or judge teachers’ pedagogy but to engage teachers in the co-construction of classroom practices for students at risk, at each their point of need. Therefore, the following summaries illustrate some of the changes that Jacqui, Penny and Toni made, in the context of their classrooms. Of interest, is the ways that each teacher influenced the co-constructive process to meet her needs within the project school.

During the research year Jacqui broadened her view of the types and purpose of language development activities in her classroom. Although she began Term One committed to the Language Development Project within her classroom (TKJDI48-55, CBRD8/5/00, CBRD16/5/00, CBRD30/5/00) she later requested that explicit language development activities for the students at risk were conducted outside her whole-class teaching time. Although antithetical to my personal view of classroom-
based language support, the change in scheduling for small group language development activities allowed Jacqui to increase her involvement, with me, and with these activities (CBRD20/7/00; CBRD3/8/00; CBRD14/8/00; CBRD28-29/8/00). In turn her understandings of oral language components in educational risk and her explicit teaching strategies were enhanced. Jacqui was increasingly able to include new and more explicit language teaching and learning strategies into her whole class program by first withdrawing and focusing on the children at risk (SR4/9/00). Jacqui’s path to enhanced teacher thinking and classroom practice was shaped by her insight into the way that competing whole class responsibilities limited her practical access to new language development practices being implemented in her classroom.

In contrast, Penny became concerned during Term Two about her students’ responses to planned small group, oral and written language activities. Penny noted that her young students did not focus on small group activities and that they needed constant adult supervision to remain on task (CBRD6/6/00, T1P22/6/00). Earlier in the year, Penny’s personal theory of language-based educational risk had prompted her to plan to extend her repertoire of speech and oral language activities in her classroom. She had intended to involve parents in daily language tasks, as well as, in small group speech-language activities for children at educational risk (CBRD16/3/00). Although confident in her theory and planning, Penny became concerned that fewer parents than anticipated were regularly involved in classroom language activities (T1PDI173).

Penny sought opinions from teaching peers (and myself) about ways to engage her students in particular language activities and ways to involve parents in meetings and classroom language development plans (CBRD27/3/00). She expressed reduced confidence in her language program and a sense of “feeling lost” about how to modify her planned program (T1PDI186). Penny initiated planning review meetings at which she would invite my feedback on her classroom language development practices (T1P22/6/00). She also reflected on the mismatch between her expectations of student behaviour and the actual responses of particular students to planned classroom language activities (T1PDI190-200).
One example comes from Penny’s dissatisfaction with her students’ classroom listening skills (T1PDI168-170). After discussion, she opted to co-construct with me, five-weeks of “explicit listening activities” for the whole class (Appendix M). However, after three weeks of co-planning and co-teaching Penny was confident and able to continue these activities without my direct involvement. She identified increments in her confidence with these new explicit teaching strategies. She opted to continue the listening skills focus independently (CBRD14/9/00) and related positive student outcomes to other teachers. Throughout the project year, Penny initiated changes in the schedule and purpose of our co-constructed planning as she reflected on her need for changes in thinking or practice (CBRD6/6/00; CBRD15/8/00; CBRD13/8/00). She expected to have input into the content, process and purpose of co-construction.

Toni’s path to change in teacher thinking and classroom practice began with clarification of our respective roles in co-construction. Early in Term Two Toni invited and accepted any explicit classroom language development activities that I chose to implement in her class (CBRD2/5/00). I interpreted Toni’s expectations of my role as akin to a visiting language expert and unlikely to shape significant change in her, thinking or practice (CBRD4/5/00). I was interested in Toni’s reflection on classroom language development practices as unlikely to effect improved educational outcomes for children at risk, over one school year (T2TDI179). She regarded any increase in the number of adults available to the children in the room as a positive influence and sought ideas about appropriate classroom practices from other staff, and from me (T2TDI113-116).

Toni continued to report her use of numerous classroom strategies in response to students’ educational risk. She asked others’ opinions of her classroom practice on a regular basis but did not seem to regard co-construction as an opportunity to enhance her thinking or to develop additional explicit classroom language development practices (T2TDI9/5/00). However, by working in parallel with whole class activities to engage small groups of students in oral and written language learning activities, I modelled alternative classroom practices for explicit language teaching and learning (CBRD16/5/00). My model of explicit language teaching, including ways to encourage children’s awareness of language-learning strategies, could be accepted,
rejected or ignored by Toni. Since she readily accepted in-class assistance by any adults, my contribution created another opportunity for her to comment on, question or discuss the potential for explicit language teaching-learning opportunities, in her classroom (CBRD9/5/00).

Rather than co-constructing Toni’s language development program on a daily or weekly basis (as with other teachers) our alternative parallel teaching continued through Terms Two and Three. After every classroom contact I provided Toni with a brief written summary of the explicit teaching practices used and the students’ responses to them. When possible, non-teaching times adjacent to my sharing of Toni’s class were used to discuss the thinking and practices I modelled (CBRD16/5/00). Toni’s acceptance of small group explicit language development activities in her classroom facilitated our sharing of language-teaching experiences (CBRD31/7/00). In this way, we shared incidental discussions about students at educational risk and my selection and implementation of explicit language development activities for them. Toni clarified which language practices she had noted and asked questions about them (CBRD16/5/00; SR4/9/00).

During school Terms Two and Three, I interpreted Toni’s acceptance of our parallel teaching of small groups of children as her practical way to gain new ideas about early childhood language activities (SR4/9/00). On several occasions, Toni requested a prescriptive list of classroom language activities to use. These requests were interpreted as Toni’s perception of, and expectation to use, “correct” strategies rather than to select and implement teaching strategies according to the strengths and needs of individual children (CBRD1/8/00). I was concerned that a prescriptive list of strategies might reduce the possibility of Toni and I reviewing our personal constructs and co-constructing classroom practice.

Unlike some other teachers, Toni did not “read, use or understand” the OWLD (CBRD26/6/00). The format may have been inappropriate for her needs. Toni did not regularly refer to written summaries of activities and strategies that I used in her class or to the Summary of Sessions prepared for Kindergarten to Year 2 classes, at the end of school Terms Two and Three (see Appendix E.) To this point I had discussed particular classroom activities with Toni (CBRD23/5/00) but had been
unsuccessful in my attempts to engage her in discussions about the reasons for particular language development practices (CBRD31/7/00). Up to this point, Toni had observed and commented on modelled classroom language development practices but I had not observed her use of “new” strategies (CBRD25/5/00). Initially, Toni did not respond to co-construction as an opportunity to shape her personal constructs and classroom practice, as other teachers had. (For example, Jacqui and Penny were requesting, using and accepting new ideas.)

However, late in school Term Three Toni began to evidence changes in her personal constructs and practices for students at educational risk. The Staff Review Workshop (SR4/9/00) seemed to be a catalyst for change (or new confidence) for Toni. At this workshop, conducted as a data triangulation session, early childhood teachers reflected and commented on their greater understandings and use of classroom language development practices as an outcome of the Language Development Project. Toni identified nine changes to her thinking and practice as outcomes of the LDP (ibid). It seemed that discussion with her peers encouraged Toni’s reflection and recognition of significant changes in her own practice. Furthermore, upon hearing that her peers had co-constructed classroom teaching with me, Toni appeared more receptive to co-construction herself (CBRD18/9/00).

As indicated by recent innovations on peer coaching (McDowall State School, 2002) Toni may have benefited from joining planning sessions with her teaching peers or by participating in a similar workshop earlier in the research year. Eventually, Toni’s teaching peers influenced her engagement in co-construction. They described the benefits of joint planning and the positive learning outcomes of explicit language development practices (SR4/9/00). Toni recognized her opportunities for professional development and began to see our co-construction as acceptable, appropriate and feasible. Of course, the time that Toni and I had taught together, albeit in parallel rather than co-constructively, are likely to have encouraged her acceptance of co-construction in her classroom. (Our sharing is documented in our working notes, daily lesson plans and incidental correspondence during 2000).

During Term Three, Toni gradually implemented some new and explicit classroom language development practices (such as the teaching of oral retell from shared
written texts) that she judged to be of value to her students (CBRD24/8/00). Her assurance was that she would soon know if they worked for her. So, despite three school terms in which I had not engaged Toni in co-constructive language development planning, she showed significant change in her thinking and classroom practice by the end of the research year. (These outcomes became clearer during later a Staff Professional Development session, 21/11/00; and through Toni’s final interview, T2T6/12/00.)

These observations of Jacqui, Penny, Toni suggest that teachers’ personal constructs of educational risk, as well as, their confidence and perceived expertise to respond to risk, continued to shape classroom practice through the research year. Teachers did not accept and apply explicit language development practices without reflection, modification or input to the language planning process. Most teachers expected to understand and make choices about relationships between characteristics of educational risk and classroom practice. Teachers’ data illustrated how they ensured that co-constructive language development planning was acceptable and appropriate to their personal beliefs, experiences and practice. As the examples show, individual teachers had particular ways of directing my facilitation of changes in their thinking and practice.

**Characteristics of co-construction**

At the close of school Term Two, my reflections and teachers’ feedback indicated several factors were influential in the effective co-construction of classroom language development practices:

- teachers’ opportunity to influence the content and process of co-construction,
- personalized processes for facilitating transitions in thinking and practice, and
- teachers’ self-perception of their strengths and support needs.

I interpreted two pre-requisites to the effective co-construction of language development practices for children with language-based educational risk in early childhood classrooms. They were:

1. Participants sharing their unique ways of seeing language-based educational risk and classroom language development practices.
2. Regard for what is acceptable and appropriate to individual teachers who “see” their educational contexts through the lens of personal belief, experience and practice.

As individual teachers enthusiastically engaged in co-constructed assessment, planning and teaching, or cautiously participated in joint language planning during school Terms Two and Three, each somehow facilitated co-construction processes. At every stage, I was aware that teachers could accept, reject or remain neutral to the co-construction of classroom language development planning. As we became more attuned to sharing our reflections, observations, language plans and teaching; I understood why each teacher presented different opportunities for co-constructive language planning (CBRD31/8/00; CBRD13/9/00; CBRD18/9/00). I was learning how teachers judged when co-construction processes were appropriate, acceptable and feasible. I needed to refer to individual teacher’s ways of seeing language-based educational risk and early childhood pedagogy, their previous beliefs and experiences, their judgements of teacher support processes and their individual contribution to how and why co-construction might work for our partnership (ibid).

Collectively, teacher stories suggested general features of co-construction that could facilitate change in participants’ thinking and classroom practice. All of these features could be recognised in my interactions with teachers like Penny and Jacqui, with whom I was regularly co-constructing language teaching and observing student outcomes. Other teachers, such as Toni, were selectively engaged in co-constructive processes. As a way of tracking developing processes half way through this action research, I documented the opportunities that co-construction provided to research participants. Together we had attempted to:

- identify personal theories,
- reflect on the adequacy of personal theories for the current situation,
- reflect on our repertoire of strategies to respond to the situation,
- identify gaps in our current repertoire of strategies,
- consider alternative theories,
- consider alternative strategies,
- relate alternative theories and strategies to prior experiences and beliefs,
• accept, reject or ignore alternative thinking / practice for the current situation,
• negotiate those aspects of alternative thinking / practice that might be acceptable and appropriate in the current situation,
• co-construct theory and practice for the given situation,
• select and implement negotiated practices for given situations, and
• share, review, select and interpret constructs and practices for future use.

Thus far, teacher stories have been selected to illustrate the potential of co-construction for changing teacher thinking and practice, to indicate developing features of co-constructive processes, and to highlight the importance of teachers’ input to facilitated change processes. However, I needed to learn more about how to better engage teachers, like Toni, who had remained on the “periphery of co-construction” after two school terms of shared action research. I needed to understand how to facilitate transitions in thinking and practice with teachers who requested ideas from myself (and others) but who were seemingly hesitant to adopt practical changes. My research focus in school Term Three was to further refine and improve co-construction processes and outcomes with participant teachers.

Furthermore, I needed to test my developing interpretations about co-construction processes and outcomes with participating teachers. I needed to collate and analyse further teacher data, develop further review processes, and monitor further co-constructions with teachers. I sought to personalize co-construction with each participant teacher, to facilitate the best teaching and learning outcomes for their students.

**Dysfunction and reconstruction**

Another teacher, Maree, joined this study for Terms Three and Four in 2000. Her story added to my understanding about how individuals could direct the co-constructive process. Maree’s story explains her sense of obligation to co-operate with an existing program and my intent to continue the Language Development Project in an acceptable, appropriate and feasible way in Maree’s classroom. Most
importantly, Maree’s story illustrates why our shared intent to achieve positive teaching and learning outcomes did not guarantee effective co-construction.

Maree and I had worked together prior to this study. As a consequence of thinking that I knew Maree’s constructs and practice (and that she knew mine) I underestimated the importance of re-establishing a positive working relationship and clarifying constructs for our new working context. The eventual dysfunction and need for reconstruction in Maree’s story, suggests that co-constructed thinking and the consequent classroom language development practices are not transferable. There is clear need for each participant to input constructs, decisions and practices to co-construct language development plans appropriate and acceptable to that partnership.

When Maree joined the Language Development Project in the second semester, particular routines and practices, established with the previous teacher, Peta, conflicted with Maree’s constructs and her preferred pedagogy. Maree experienced conflict between her intent “to continue things as they were going” (TPMDI3) and her perception that “things weren’t actually working out” (TPMDI4). Maree reported, “I went back in there trying to keep things as they were so as not to disrupt the children’s routine but there was some things that I couldn’t work with so I had to change a few things” (TPMDI24).

Maree and I took some time to identify why we weren’t working co-constructively, despite having agree to do so. Gradually, Maree clarified differences between her constructs and practices of early childhood language development and those of the established routines (CBRD26/7/00). Having discussed aspects of the established classroom routine that Maree found unacceptable, we were able to reconstruct classroom language development planning (CBRD3/8/00). One example comes from pre-primary news-telling.

Peta and I had established a two-group, two-teacher interactive format for news telling. This arrangement developed in response to Peta’s request for planning, demonstration and practise of oral language strategies for the whole class at news time (CBRD2/5/00). The use of two groups created an opportunity for each teacher to trial planned strategies, to implement particular strategies for selected children,
and for children to purposefully rehearse their news with one teacher before presenting it to the second teacher. Furthermore, the two-group format allowed us to begin as a whole class, to demonstrate and observe planned language development strategies, and then to work in smaller groups to provide more talking turns for each child. The two-group format provided both Peta and myself the opportunity to analyse student outcomes against variations in our teaching methods if necessary.

Maree’s training, level of confidence and perceived expertise (CBRD13/9/00) supported her preference for a whole class, circle news format. I interpreted Maree’s comments about her need for change, as follows. Maree believed she should continue with the language development program co-constructed by Peta and myself, despite her need for change. I had begun the partnership with Maree by sharing documentation of the planning, implementation and interpretations of student learning outcomes that I had planned with Peta. Maree felt that she was unable to initiate changes to the program in her classroom despite the fact that I had invited her input, encouraged preliminary discussions, and invited her response to established classroom practices as we continued them (CBRD26/7/00).

Both Maree and I initiated some changes to the classroom program during Term Three. Maree suggested alternative times and locations for small group language development activities within the early childhood centre. I sought Maree’s opinion about the number of parents involved in small group language activities and the impact of their presence on Maree and the rest of her class. My aim was to continuously seek and value Maree’s input (CBRD13/9/00).

Perhaps Maree’s suggested minor changes (such as timetable details) were early indicators of her interest in greater input and further modification of the established program (CBRD14/9/00). Another interpretation is that Maree initiated changes to aspects of the established program that were unacceptable to her view of classroom learning. By inviting and responding to each other’s opinions we gradually acknowledged our respective strengths, needs and preferences. My belief was that recognition of individual strengths, needs and preferences could encourage an attitude of co-construction and our renegotiation of established thinking and practice, as necessary (CBRD13/9/00).
Before Maree recognized the importance of her personal constructs and opinions to co-construction, she independently made changes to return her classroom to an appropriate and acceptable way of working, for herself (TPMDI28). Maree’s discontent effectively stimulated further review of the Language Development Project in her classroom. We resolved that previous ways of thinking about and facilitating oral and written language development in this early childhood class were not productive for our partnership. We could not reconstruct a climate for shared classroom practice until we understood which practices were unacceptable to our partnership, and why. We also needed to understand the extent of our differences in personal constructs of educational risk and early childhood language development (CBRD13-14/9/00) as a shared focus for dialogue. Then we could decide whether or not to co-construct change, and how (TPMDI15-16).

On reflection, I recognized that Peta and I had co-constructed the language program over two school terms to ensure a match between our shared constructs and selected practices. Maree’s initial attempt to accept classroom practices that actually conflicted with her personal constructs, disguised our need to further negotiate our thinking about early childhood language development and our roles in planning classroom language activities (TPMDI2-5, TPMDI24). We needed to understand what wasn’t working before we could co-construct an alternative.

The stories of Maree, Penny, Jacqui and Toni demonstrate the importance and value of all participants in co-constructive processes. My dysfunctional early relationship with Maree was useful as a checkpoint for future, effective co-constructions. Maree was the only teacher who had to choose to accept (or reject) a classroom language plan co-constructed by others (TPMDI14). I misinterpreted her initial acceptance of these language development practices as confirmation that she also accepted the child language constructs influencing these practices. In the end, Maree’s story highlighted the importance of re-constructing shared thinking and classroom language development practices with each teacher, in each new context, despite apparent acceptance.

Maree’s story reiterates Bussell’s claim, “You can’t make anyone DO anything if it doesn’t match their life values” (2002). Maree’s attempt to accept the constructs and
practices of others was eventually challenged by her own constructs, prior practices and values. Maree influenced the theory and practice of co-construction by making this clear to me. Her data contribute to understandings about how changes in teacher thinking and practice “really come about” (TPMDI14). Maree greatly assisted my task of exploring how each teacher thinks, feels and acts in response to co-construction opportunities. The experiences of working with Maree, greatly enhanced my understanding of co-construction processes.

As stated by Wadsworth (1997):

other people see things according to their interests and values… It’s not a matter, at this stage, of saying what is of most importance or who is right or wrong, but of being open to (and documenting) all these ways of seeing the world (p. 11).

Recent contact with language specialists and specialist teachers suggests that although many of them readily accept Bussell’s (2002) comment about the importance of values and constructs, the development of positive working relationships between language specialists and classroom teachers can be problematic. Some language specialists report a neutral or hostile response from some teachers (Bochenek, 2002; 2002, October). Simultaneously, teachers report that particular language specialists expect them to implement recommendations they regard as unacceptable (T2TDI292). In this study, teacher stories clarify the importance of regularly inviting reciprocal input to co-construction.

In Chapters 6 and 7, I discuss the potential of co-construction as a defensible and alternative way to effect change in teacher and language specialist thinking and practice. My belief is that teachers and language specialist teachers could benefit from professional support to understand the importance of personal constructs, the processes facilitating transition in thinking and practice, and ways to build co-constructive relationships.
Personalizing co-construction

The importance of understanding teachers’ ways of seeing language-based educational risk cannot be over emphasized. So far, teacher stories have illustrated some early childhood teachers’ views of language-based educational risk and their responses to students at risk in their classrooms. These stories have explored diversity in teachers’ thinking about language-based educational risk and some ways in which teachers have influenced the co-constructive process. I have discussed how teachers like Jacqui, Penny, Toni and Maree shaped the development and my interpretation of co-construction theory and practice. They taught me that co-constructed practice is a continuous and reciprocal process of facilitating transitions in participants’ thinking and practice.

I returned to teacher data to consider the notion of transitions in participants’ thinking and practice and what this means for personalizing co-construction. Initially, I attempted to analyse the influence of co-constructive language planning using Kelly’s definitions of links between emotional and cognitive states (Bannister & Fransella, 1974). Kelly described construct systems as encompassing both the cognitive and emotional domains and being “in transitional states” (p. 35). I data-analysed teachers’ transcripts and identified anxiety, hostility, guilt, threat, fear and aggression as possible states of awareness from which co-construction processes provoked change in teachers’ personal constructs.

For example, Bannister and Fransella (1974) interpret Kelly’s definition of “anxiety” as a person’s response to their partial construing of events around them, an awareness that “unknown aspects” of an experience challenge their current constructs (p. 35). For example, I used this definition to analyse Jacqui’s data and interpret her as one teacher in this study for whom change in thinking and practice appeared to be prompted by anxiety about her need to develop additional language expertise (TKJDI51-55). More recently, I revisited teachers’ data and interpreted transitions in teachers’ thinking and practice with reference to other literature. Many authors clarify the need to personalize teacher development. These ideas, documented since the 1970s, are in accord with my current learning about co-construction.
Hall and Jones (1976) distinguish between personalization and individualization in teacher education. As in co-construction, Hall and Jones regard individualization as self-paced learning and the identification and sequencing of teaching and learning at individuals’ point of need. By contrast, personalization supports one to learn about his or her personal needs, potential and limitations. The general features of co-construction listed above are intended to encourage one’s reflection on current theories and strategies, then to identify and select co-constructed learning. In this sense, the process of co-construction is more important than the specific language content negotiated, for the individuals concerned.

Another aspect of Hall and Jones’ (1976) work relevant to co-construction, is the idea that the sharing of concerns, as when exchanging personal constructs, assists the open communication between teaching partners and facilitates decision-making about issues arising. Although they emphasize the importance of teachers recognizing their own concerns, Hall and Jones believe that there exists a predictable sequence of concerns for many teachers. This proposed sequence begins with concerns about self, progresses to concerns about their teaching, and then to concerns about whether or not students are learning. This notion of sequenced concerns could assist co-constructive partners to address appropriate issues in the future.

Joyce and Showers (1988) state that knowledge about what works in staff development requires much study, practice and innovation in education. Their recommendations have much in common with the developing theory and practice of co-construction. For example, they believe that teachers’ training and the extensive practice of new learning “have to reside comfortably in the school setting and be collaborative activities” (p. 17). These authors recognize that new teaching strategies can cause dislocation and discomfort for teachers. Hence, “shared understanding about both the content and process are necessary for collective action to occur” (p. 25). I have discussed how the shared knowledge of peer involvement in co-construction processes encouraged Toni’s active response to change opportunities.

Joyce and Showers (1988) suggest that humans tend to develop patterns of learning over time. They categorize learner types to explain behaviour and plan staff development in schools, an idea that could help to personalize future co-construction.
The retrospective identification of learner types in this study assisted my interpretation of teachers’ engagement in co-construction. According to Joyce and Showers’ (1988) classification, teachers Penny and Jacqui are “gourmet omnivores” who “strive to learn all they can about their craft and give and take energy from their peers” (p. 134-135). Most of the other participant teachers (Toni, Suze, Peta, Karen, Kate, Coral and Sheryl) are “passive consumers” whose activities depend greatly on who they are with (p. 135). As some of their stories show, passive consumers can be drawn into activities generated by colleagues, as Toni gradually was by personalized co-construction processes. The third category is the “reticent consumer” (p. 136). The data I have of Maree suggests that she may be described in this way. However, this is a cautious interpretation given Maree’s involvement for one of the two action research semesters, and her return to an established classroom program.

Another similarity between the work of Joyce and Showers (1988) and this research relates to the use of conceptual systems theory to understand how people organize their information about the world. These authors describe “substantial correlation between conceptual development and the states of growth” of teachers and administrators (p. 137). My work examines teachers’ personal constructs, classroom practice and individual responses to co-construction, to understand influential factors in this type of teacher development. Like Joyce and Showers, I use the notion of conceptual flexibility to analyse the variety in teaching styles, teachers’ response to opportunities to increase their repertoire of practice, and teachers’ understanding of, and planning for, individual students.

In the current study, the term co-construction is intended to reflect the essential input of all teaching participants in classroom planning and teaching. As such, personalizing co-construction is a metacognitive process. I attempted “to make sense out of the ways in which (teachers) make sense out of their worlds” (Bannister & Fransella, 1974, p. 42). As participants shared their understandings of personal constructs and influenced co-construction content and processes, I worked to translate teachers’ data about themselves, their students at risk, and classroom practice, into co-construction theory.
Construct theory provided a way of understanding teachers’ responses to change in classroom practice. The following stories substantiate how my insights into teachers’ ways of seeing their experiences, guided my input to our co-construction of classroom language development plans.

Continuing the stories of Maree and Penny provides contrastive anecdotes to the story of co-construction. Both of these teachers influenced the co-construction process, in different ways. In addition, the story of Coral is told here to represent another way to personalizing co-construction with teachers. Coral, like Toni, agreed to co-construct practice but did not initially respond to opportunities to change her thinking or practice. I needed to learn how to personalize and support change processes.

From data to the theory of co-construction

Bannister and Fransella (1974) explain that individuals do not always act as they predict or expect to. People sometimes adopt rule-ridden behaviour as an alternative to acting in ways that are unpredictable or disconcerting for them. During the Language Development Project, I interpreted Coral’s initial responses to co-construction opportunities in this way. Coral’s voluntary participation in the study was interpreted as her acceptance of the potential benefits of co-construction. Yet from the outset, Coral specified routines for my participation in her classroom (CBRD3/4/00) that suggested her discomfort with this research.

During school Term One, Coral described herself as ‘non-analytical’ (CBRD29/2/00). She described her method of classroom language planning as working “off the cuff” and indicated some concern that she didn’t “reflect on teaching-learning strategies” (ibid). This summary was supported by observations of Coral’s teaching routines. For example, Coral black-boarded spelling lists of ten words on Mondays and asked the children to say the word and spell each word three times in chorus on Monday through to Thursday. On Friday the class completed a test on the ten words. The following week, new words were black-boarded. No variation on this spelling strategy was reported or observed during the researcher’s participant observation time in Coral’s classroom.
Coral also discussed her dislike of any other adults in her classroom. She identified her discomfort with parent helpers in her classroom, explaining that she did not encourage parents to participate (T2C29/2/00). Despite her self-perception as non-reflective, Coral gave four reasons to support her decision to limit parent involvement in her classroom. She was concerned about parents breaching confidentiality with regard to individual students, she suggested that parents did not follow up classroom activities at home if asked, they did not have the skills necessary to support classroom tasks and, of greatest concern to Coral, was the opportunity that classroom participation offered parents to observe and criticize her pedagogy (ibid).

Coral developed several rules to begin our interactions for the Language Development Project. She seemed to need established procedures that were predictable and familiar, rather than confronting, unpredictable or disconcerting. She specified my routine for entering her classroom: “Don’t sit with the children or greet them. It’s too disruptive” (CBRD3/4/00). I interpreted Coral’s need for rule-based interaction as important to her. I needed to understand and accept Coral’s self-disclosure an indication of how she could be supported through change over time (CBRD2/5/00).

During Term Two, Coral’s input to co-constructive planning discussions began to change. As she became familiar with classroom-based language support and co-constructive language planning opportunities, Coral reduced her defining of my behaviour in her class and began to comment on my participant researcher role. For example, she observed my use of oral language rehearsal strategies as a precursor to a small group written language activity for students at risk. Coral agreed that these students “need the oral before they write” but acknowledged that she did not monitor students routinely (CBRD2/5/00). She reflected, “I don’t think about it. I don’t know language like you do” (ibid). I understood that Coral needed to have opportunity to observe my classroom practice in parallel to her established classroom routines. In this way, she could observe and comment on my planning and implementation of strategies for students at risk, when she felt comfortable to do so.

Throughout this study, Coral was uncomfortable when asked to comment on her observations of our shared classroom experiences. Therefore, I used her classroom
routines as foundations from which change could be co-constructed. For example, knowing that Coral did not document her lesson plans ahead of time, I implemented explicit teaching and learning strategies, matched to the needs of the students at risk in a small group, within her spontaneous lesson structures (CBRD2/5/00; CBRD11/5/00; CBRD18/5/00). I did not ask to see Coral’s documentation to assist my preparation as I did with some other teachers. In this way Coral’s classroom routines, such as the use of one text by the whole class, could be used as a starting point for demonstrating change (CBRD11/5/00, CBRD29/5/00). I did not make value judgments to Coral, about her current pedagogy (CBRD26/6/00).

By Term Three, Coral was apparently more comfortable with the research project in her class (CBRD14/8/00; CBRD18/9/00). She spontaneously described changes in her thinking and practice specific to classroom-based educational risk (CBRD31/7/00; CBRD). For example, she asked me about a particular student at risk, prefacing her question with a description of her analysis of the child’s reading difficulty. By accepting her description of the child’s unusual oral movements, we moved to negotiating my assessment of the child’s oral language and literacy behaviours (CBRD31/7/00). Consequently, Coral and I co-constructed a Term Three Individual Education Plan for the child, sharing our observations and theories about his needs. This was a marked contrast to Coral’s Term One discomfort when asked to nominate students she considered to be at educational risk. She had discussed her feeling of being unable to do so.

The stories of Maree and Penny contribute to further understandings of transitions in personal constructs and interactive processes in co-construction. Recall that Maree sought to implement her preferred and familiar constructs and classroom practices, rather than continue the language development practices established by Peta and myself in her classroom. It is important to acknowledge that this response to the established language development practices can be interpreted in several ways. The differences between the established practices, and Maree’s preferences, seemed to indicate conflict between Maree’s familiar constructs and an alternative way of teaching in her classroom. However, Maree’s preferences could also reflect her judgement that she was not comfortable teaching in this way, or that she did not see merit in the ideas being used. Co-construction is a way to resolve such issues.
My interpretation is that Maree attempted to make sense of the Language Development Project in her classroom by sampling and rejecting components of it. For example, near the end of Term Three, Maree requested that I no longer include parents in structured language development activities in the classroom (CBRD14/9/00). I accepted that the parent involvement could not continue in Maree’s classroom when she had requested otherwise. The parents involved were very keen to continue working on language development tasks with their children and reluctantly accepted the suggestion to move to another classroom (ibid).

However, changes to Maree’s classroom language development practices, initiated by her, became critical to our later co-construction of language plans for students at educational risk in her classroom. My acceptance of Maree’s requests was followed by her attendance at a couple of the rescheduled parent-child language groups. Maree reflected, “I wouldn’t want parents involved.” (CBRD7/12/00). However, she acknowledged that the parent group was “really useful” and she was surprised by the detail of the work and parent insights into their children’s learning (ibid). At other times in the last school term, Maree and I reflected on particular classroom practices and began to co-construct our ideas. One important example was during a writing activity, when Maree asked my opinion about the sound-letter processes used (CBRD29/11/00). Perhaps Maree just wanted to be the one to ask.

Maree’s story reminds me of the need to understand “the person in psychology” (Bannister & Fransella, 1974, p. 44). The notion comes from Kanshitaki who states, “Speech is not what one should desire to understand. One should know the speaker… The deed is not what one should desire to understand. One should know the doer” (ibid). This is an important point for constructivist interpretive research. Teachers know how they want to teach in their classrooms. They also know whether or not they are ready to co-construct practice with others. My task was to facilitate opportunities for co-construction in ways that valued all participants.

Constructivist interpretive research relies on persistent diligence in the interpretation of teachers’ constructs, their teaching, and change as an outcome of action research. Since Maree and I held significantly different constructs of the language teaching-learning-assessment cycle in early childhood classrooms, her acceptance of
established practice and our co-construction of classroom language development plans were challenged. My attempt to understand Maree’s constructs and to work co-constructively with her, is an example of the need to repeat data analysis, consider context, use available theory and verify my interpretations through further discussion with her. My final interpretations of our co-constructive partnership were gleaned from spoken data, observations and cumulative understandings of Maree as a person and as a teacher. Working with Maree was another opportunity to learn about ways to enhance and improve the practice of co-construction and to consider co-construction theory.

The final anecdote for this chapter is from Penny. According to Joyce and Showers (1988) categorization, Penny was a gourmet omnivore teacher who welcomed the new as a means to elaborate and extend current constructs. She reflected on her classroom organization, her teaching strategies and evidence of children’s learning to deal with perceived problems proactively. Penny selected issues and made active choices about ways to elaborate her thinking and classroom practice. She sought professional development opportunities through co-constructive language planning.

For example, when Penny was unsure about the structure and balance of her classroom language program, she initiated a review-planning session with me. Penny regularly asked, “Am I doing OK?” (CBRD13/6/00). She invited constructive criticism from colleagues with whom she believed she shared common constructs of early childhood education. She engaged with opportunities to change her teaching and her students’ learning, as required (T1P22/6/00).

The earlier story of Penny’s choice to teach listening skills to her whole class illustrates how she reflected on a need for change, considered several possibilities and settled on a co-constructed listening program. Penny sought to recognize theory and practice acceptable to her current constructs of her classroom. She did not want “to be told what to do.” She wanted to be asked “what she wanted to do” (TIPD1232). She did not reject new ways of seeing language-based educational risk, but sought to understand them. Her active participation in the co-construction of the whole class listening program was typical of how she reviewed her current constructs, extended her thinking and tried new ways of teaching (see Appendix M).
Penny contrasted her experience of co-constructive language planning with the isolation she felt as a graduate teacher in the previous year. She recalls:

When I came here I played around for the first few weeks getting to know the kids and things like that and after that I just went, ‘Far out! Nobody’s helping me. I don’t even know where I’m meant to be.’ I was lost for a while (TIPDI219).

Early in the research year, Penny recognized her need for further direction. She self-evaluated her language planning prior to requesting that we work together more. Her words were:

There’s no consistency. I have problems. I have programs. None of them work. I’ve tried at least twenty. Nothing works… Within a week you should see some response and there won’t be any. And I keep on going and that’s why I find it’s really tough (TIPDI186).

Penny often self evaluated her learning after we had planned and implemented classroom language development activities together. For example, after planning and using phonological awareness activities as part of the whole class mat session, Penny concluded, “I can do that, I don’t need further help.” (CBRD18/5/00).

These anecdotes confirm the positive outcomes of Penny’s active learning via co-constructive language planning. Her comments and my various perceptions of teachers’ self-confidence as they implemented new, explicit language practices, prompted my reflection on connections between teachers’ self-perception and experiences of co-construction.

**Self-perception and co-construction**

Joyce and Showers (1988) review the work of Maslow (1962) and Rogers (1961) to link teachers’ concepts of self to professional development opportunities. They recommend that insights into teachers’ self-perceptions can assist the design of appropriate content and processes for teacher development programs and “help us to
understand why people respond as they do” to (p. 139). Bannister and Fransella (1974) related personal construct theory to social constructivist learning. They explain, “our picture of our own individuality is built up by our assessment of others’ pictures of us”; that individuals use socially constructed self-evaluations to verify the personal constructs they develop of themselves (p. 42).

During the Language Development Project, my intention was to affirm teachers’ positive self-concepts as they recognized and responded to the strengths and needs of students at educational risk in their classrooms. Another intention was to affirm changes in teachers’ thinking and pedagogy as positive outcomes of co-construction.

However, collating and analysing data on teachers’ self-concepts was a complex task, as an anecdote from Coral demonstrates. Coral’s self-concept was built on the view that other adults would “watch and criticize her” (CBRD29/2/00). She had not experienced a confirming picture of herself as built by others. During the project year, I sought to rebalance Coral’s self-evaluation by commenting positively on shared classroom incidents. For example Coral’s spelling routines were used to discuss positive spelling outcomes for selected students (CBRD28/8/00). Questions were then posed about how other students’ needs might be met by Coral and myself working together. In this way, Coral’s self-concept could be supported while changes in teacher thinking and practice were provoked. The sharing of classroom experiences with Coral was essential to understanding how best to support her professional growth. Coral needed a positive experience of an adult in her room to encourage her acceptance of opportunities for co-construction (SR4/9/00).

The importance of teachers’ self-concepts for reflecting on personal constructs was apparent throughout this project. Although every teacher offered a personal theory of educational risk during initial interviews, most teachers needed some assurance that I was interested in their personal understandings of educational risk and that all constructs would be valued (rather than judged). My interpretation was that most teachers lacked confidence in the importance of their personal theories of language-based educational risk to out co-constructions. Some teachers, such as Toni, seemed unaware of their personal theories until they were invited to share them (CBRD18/2/00; T2T28/2/00). In early data transcripts, Toni’s personal theories were
characterized by attention to particular children, frequent references to what she
didn’t know and regular invitations for me to provide definitive information
(T2TDI4-40).

Penny’s reputation amongst her colleagues as the most capable and confident teacher
in this study impacted on other teachers in two ways. Those who identified with
Penny were encouraged to see their potential. Suze, who was a recent graduate with
similar training and a comparable work history, expected to develop as Penny had
(CBRD14/8/00; CBRD12/9/00). For other teachers like Coral, Penny’s example
possibly “threatened her major beliefs about the nature of (her) personal, social and
practical situation” (Bannister & Fransella, 1974, p. 37). For example, Coral may
have perceived Penny’s confident discussion of students during a teacher workshop
as unattainable (CBRD9/00). Perceiving herself as “non-analytical” (CBRD2/5/00),
Coral is likely to have rejected Penny’s student analysis as conflicting with her own
experiences of teaching.

Studies of perception and self-concept acknowledge that different people construe
the same information in many different ways. Hansford (1988) reviewed self-
appraisal as an outcome of diverse day-to-day interactions and the roles played with
others. He regards “teaching as a role that must be learned” (p. 57) and self-appraisal
a way to assist beginning teachers to meet the needs of the situation and the
expectations of others. He also suggests that the complexity and ambiguity of
information in classrooms compounds the processes of selection, organization and
interpretation for teachers who review constructs as they teach.

Teacher data indicate that perceptions of self can influence individual responses to
co-construction. Personal construct theory posits that both cognitive and emotional
experiences contribute to the formation and transition of personal constructs
(Bannister & Fransella, 1974). I regard co-construction as a meta-discipline,
complicated by participants’ perceptions of self, emotional and cognitive factors in
construct transition, and the interaction of two (or more) individual worldviews.
The co-construction template

Teacher stories specify outcomes of co-constructive language planning for individual teachers in early childhood classrooms. I have discussed how changes in teachers’ personal theories of educational risk can be linked to their participation in co-constructive language planning during the year. After analysis of term two and three data, the following template for the co-construction of language development practices in early childhood classes, adds detail to the general process of co-construction outlined earlier.

This template is proposed as a summary of the theory and practice of co-construction evidenced through this action research project and detailed in teacher stories. It functions as concise documentation of prolonged and extensive data collection, a constructivist interpretative outcome of participatory action research.

Theoretically, the co-construction of language development plans provided each teacher with the opportunity to:

- identify personal theories of educational risk and the teaching and learning of language in early childhood classrooms,
- reflect on the adequacy of their personal theories about language-based educational risk for their class of students,
- reflect on their repertoire of language teaching and learning strategies with which to respond to perceived educational risk in their students,
- identify gaps in their current repertoire of oral and written language teaching-learning strategies for the students they were teaching,
- consider alternative theories of language-based educational risk to explain what they knew or questioned about their students,
- consider alternative language teaching-learning strategies with which to respond to the perceived strengths and needs of their students,
- relate alternative theories and strategies about language teaching–learning to prior experiences and beliefs in order to reconstruct their understandings for future teaching-learning possibilities,
• accept, reject or ignore alternative thinking / practice specific to language-based educational risk in their early childhood classroom,
• negotiate aspects of alternative thinking / practice specific to language-based educational risk, as well as, acceptable and appropriate in their classroom,
• co-construct theory and practice specific to language-based educational risk as necessary,
• select and implement explicit language development practices for all students in their early childhood classes (not only those at educational risk), and
• share the review, selection and interpretation of constructs of oral and written language teaching-learning for future use in early childhood classrooms.

As a summary of co-constructive processes, this template represents that which was consistent in the opportunities offered to each of the ten participating teachers in this study. As shown in parallel stories, it is not a summary of outcomes for the ten participant teachers. The nature of teaching (Hall and Jones, 1976) and the demonstrated need to personalize the content and processes of co-construction, explain the multiple outcomes for teachers specific to changes in their thinking and pedagogy. Future research could examine critical influences on these outcomes against this template of common opportunities.

Co-construction developed from intent to improve on the effectiveness of collaborative practices between teachers, researchers and specialist service providers. Five recommendations made by Tripp (1993) were expanded and specified in this study. They are:

1. A shared commitment to the necessity for the research,
2. A research agenda consisting of topics of mutual concern,
3. Equally shared control over the research process,
4. Outcomes that are of equal value to all participants in professional terms, and
5. Using “fairness” to inform matters of justice amongst participants (p. 148).

The impact of these recommendations is apparent in the general and specific templates for co-constructing teachers’ thinking and pedagogy, in this chapter.
In the words of Carr and Kemmis (1986) the process of developing this template, with participant teachers, can be described as interpretive and scientific:

‘Interpretive’ in the sense that it generates theories that can be grasped and utilized by practitioners in terms of their own concepts and theories; ‘scientific’ in the sense that these theories provide a coherent challenge to the beliefs and assumptions incorporated in the theories of educational practice that practitioners actually employ (p. 118).

Whether one engages with the general and specific templates of co-construction or not, some issues remain. Our individual lenses of personal constructs and social judgements remain active. Participants will decide what to accept, reject or remain neutral to, as co-construction develops in their context. Prior beliefs, experiences and practices of language specialists and classroom teachers are likely to shape their perceptions of the value (or otherwise) of future attempts to work together.

**Summary**

As co-construction developed during the second and third action research cycles, two features became increasingly important: (a) the sharing of personal constructs and classroom practice, and (b) opportunities for participants to decide when and why theory and practice were acceptable and appropriate to them. In addition, the provision of continuous opportunities for participants to influence the content and processes of co-construction, the need to personalize co-construction to facilitate change, and recognition of teachers’ self-perceptions of their strengths and support needs; emerged as influential.

Clearly, co-construction doesn’t just happen. It needs to be facilitated through professional discourse in schools and shared practice in classrooms. Final teacher reflections on the outcomes of co-construction from this study, are documented with Term Four data in the next chapter.
Chapter 6

Influential factors in co-constructive decision-making: Teacher reflections and researcher interpretations

“In the learning-centered model, expertise is explicitly and continuously shared with the student as teacher and student engage together in meaningful and productive shared activities.”

(Wilhelm, 2001, p.9).

Introduction

How do co-construction processes influence outcomes?

Believing that co-construction facilitates improved student outcomes is not enough. Teachers and researchers need to demonstrate, see, experience and understand the conversion of co-construction theory to classroom practice. Unless participants “accept” that co-construction processes translate theories of child language development, early childhood education and student data to classroom practice, co-construction will remain a plausible developing theory. Here, participants’ reflections and interpretations clearly support co-construction as an effective means of accommodating variation and supporting change in teachers’ personal constructs, pedagogy and their self-perceptions. Teachers, as active learners, influence their personal outcomes.

In this study, I demonstrate that most teachers support co-construction as an acceptable, appropriate and effective way to engage in changing their thinking and pedagogy. Teachers who contribute to and implement co-constructed classroom language practices for students at educational risk are empowered by growth in their confidence and expertise. Consultancy and collaboration are alternative support services for classroom teachers seeking to support the language development of students at educational risk. In this chapter Vygotskian thinking and teachers’ data
are brought together to argue that co-construction compares well to consultancy and collaboration as potential means for effecting change in teacher thinking and practice.

I acknowledge that consultancy, collaboration and co-construction can all improve students’ language learning outcomes. I report on the advantages of co-constructed learning and the positive influence of the teachers’ “voice” as an important principle of co-construction. Each participant has a voice that is acknowledged and valued as making a difference to the negotiation of thought and practice. Preferences, ideas, concerns and evaluations of both the content and processes of co-construction are expressed as teacher voice.

Throughout this study, teacher voice is used as a tool for monitoring continuous learning, respecting current constructs, defining prior beliefs, experiences and practices and interacting with peers, researchers or expert service providers. Sometimes, teacher voice is a collective term for the opinions of teacher participants in this study. Elsewhere individual participant teachers reflect on how their co-constructive experiences influenced their teaching and learning outcomes.

Co-constructive processes for building and translating teachers’ understandings about students at educational risk to effective pedagogy, present a new contribution to early childhood education and the management of students at educational risk. Researchers and educators acknowledge that “high quality teaching is most important in children’s literacy learning” and conclude that “investment in long-term professional development for teachers working with students who have learning difficulties” is of “the utmost importance” (Rohl & Rivalland, 2002, p. 37). Co-construction is a way of personalizing effective professional development in classrooms.

**Teachers as learners**

Teachers as learners have stylistic preferences for learning just as I, also a learner, prefer particular interactive processes. In this study, data analysis shows how teacher-researcher learning interactions were modified as participants became
attuned to the personal constructs, preferred learning styles and expected outcomes of their co-constructive partner/s. Data from the fourth and final action research cycle substantiate the extent to which teachers negotiated and manipulated their personal constructs of early childhood language development and educational risk during this project. Emphasis is given to teachers’ reflections on factors that provoked changes to existing classroom practices or prompted the development of new classroom strategies. The elicitation of teacher voice throughout the project is shown to influence the maintenance, repair or elaboration of co-construction processes. Teacher voice is the essential monitoring tool during co-construction processes.

The interactive nature of co-construction allows the teacher voice to be developed and to function like a metacognitive gauge, used by all participants to shape further co-construction. In Wilhelm’s (2001) terms, co-construction could be described as a two-sided, learning-centered process during which “expertise is explicitly and continuously shared (as participants) engage together in meaningful and productive shared activities” (p.9). Interactive learning is used as an abbreviation for two-way, learning-centered processes throughout this text. Interactive learning is a feature of co-constructed planning and classroom practice.

Since in this study (and as a principle of education) teachers and researchers are both learners and teachers, I have modified Wilhelm’s (2001) terminology to apply his Vygotskian perspective to co-constructed adult learning. Where Wilhelm (2001) critiques teacher-centered models as information rather than process focused, I refer to “information centered learning” rather than teacher-centered learning. Where Wilhelm is concerned that student-centered models “assume that much learning occurs naturally” (p. 9), albeit in a supported learning environment, I refer to “learner-centered learning” rather than student-centered learning. Both information and learner-centered learning can be limited by their one-way initiatives. By contrast, “interactive learning” engages participants in two-way learning-centered processes.

Expert information given to teachers by consultants is a form of information-centered learning for adults. It is one-sided. Adult collaborative learning implies that teachers can initiate and shape their learning, supported by others, like students’ in learning-centered classrooms. In reality collaborative learning between classroom teachers
and visiting service providers (often regarded as experts in their field) has various outcomes. Unlike Tripp’s (1993) recommendations for establishing teacher-researcher partnerships, collaborative processes can be limited by the reduced motivation, ability and confidence of teachers to share their strengths and needs with experts (CBRD14/8/00).

Both consultancy and collaboration processes could elicit teacher voice. But neither model relies on teacher voice to check how the information given or requested sits with the personal constructs and prior experiences of both participants. Unlike co-construction, neither consultancy nor collaboration require classroom practice to test conversion of theory to practice or to reflect on the effectiveness of planning. Bennett and Rolheiser (2001) remind teacher educators of the effectiveness of teachers’ interactive and sustained learning, in classrooms. As with co-construction, effective classroom teachers are best supported by other active and creative learners who respond to classroom complexity.

Co-construction: data for research question three

Previous data analysis confirmed that co-construction doesn’t “just happen”. It requires that participants’ needs, preferred content, processes and intended outcomes be negotiated. Co-construction relies on a two-way information exchange and a focus to reciprocal learning. Participants’ learning is based on common constructs, negotiated planning and actual classroom practice. The third research question asked, What are the implications of the co-construction of classroom language development plans for effecting transitions in teacher thought and pedagogy? Co-construction is proposed as a way for participants to learn (rather than be told) about classroom language planning, selection, implementation and outcomes.

Links between teacher confidence, expertise and the co-construction of classroom language development practices remained unclear until Term Four data was analysed and interpreted. As teachers reflected and reported on outcomes of their participation in this study, a pattern emerged. Teachers’ self-confidence (Analytical Statement 6, Chapter 4) and teachers’ perceptions of themselves as having developed new language expertise (Analytical Statement 7, Chapter 4) increased, as they reflected
on their learning and when peers acknowledged their expertise. Further teacher stories confirm how co-construction shaped the confident selection and implementation of classroom language development practices.

During the fourth action research cycle teachers were particularly encouraged to reflect and report on their perceived increments in language development expertise and their level of confidence to use this expertise. Thus, research data from action research cycles two, three and four are used to confirm Analytical Statements 8 – 13 (Chapter 5). However, teacher and researcher interpretations are more appropriately reported as continuing teacher stories than as a statement-by-statement report. The continuation of teacher stories confirms how different the co-construction experience was for Jacqui, Penny, Toni and Maree. This selection of these teacher stories indicates how and why each teacher’s voice and each interactive partnership determined different co-constructive outcomes.

Generally, co-constructive processes effect change in thought and pedagogy. Data confirm that all participant teachers reported some increments in language development expertise and related confidence (SR4/9/00). All identified areas for further development (Evaluation 21/11/00). However, specific outcomes of co-constructed change are determined by participants’ constructs, emotions, reciprocal input (voice), self-concept and engagement with interactive learning in their classroom contexts.

At the beginning of this study, I had not expected to examine teacher confidence and perceived expertise as elements of change in teacher thinking and pedagogy. However, eliciting teacher voice and tapping into teachers’ self-concepts became part of the interactive process of co-construction. Teacher reflection data from Term Four is a powerful means of confirming and amending my interpretations of teacher self-judgements and confirming positive outcomes from the co-construction of language development practices. The Staff Review Workshop (for data triangulation on 4/9/00), the staff professional development and LDP evaluation session, final teacher interviews, outcome summaries (presented 14/11/00; 21/11/00 & 24/11/00) and my Research Diary all document teachers’ levels of confidence, competence and expertise as outcomes of the Language development Project.
Researchers and teacher stories

Teacher voice changes the researcher’s role in collecting teacher stories. Rather than simply reporting teacher practice or assuming teacher thinking, the co-constructive researcher functions as an interpreter of teacher thinking, making and checking links to classroom practice. Furthermore, the researcher’s participation in the story provides a first-person story-teller role. As interpreter, participant and reciprocal learner co-constructive researchers use data analysis to inform theory and practice. Interaction between teachers and researchers provides for constant verification of story events, story telling, interpretation and generalizations.

Tripp (1993) believes that material from teachers’ practical experiences can inform theory. Radnor (2002) states of interpretive research, “It is the researcher’s responsibility to engage in transactions with the participants in their own natural setting” (p. 32). Carr and Kemmis (1986) assert,

the only legitimate task for any educational research to pursue is to develop theories of educational practice that are rooted in the concrete educational experiences and situations of practitioners and that attempt to confront and resolve the educational problems to which these experiences and situations give rise (p. 118).

The importance of teacher stories in this study became clear as the content and processes of language development planning were specified and co-constructed by teacher-researcher pairs. Story directions were determined as participants interacted and redirected one another’s thinking and practices about classroom language development. Each story involved many characters (teacher, researcher, students and parents). The continuous elicitation of teacher voice clarified how each teacher regarded our co-construction of classroom language plans. Individual teachers reviewed and reported factors influencing changes in their thinking and practice.

A grounded theory approach involves teachers “in the process of theorizing” (Tripp, 1993, p. 148). Tripp discusses improving teacher judgement of “critical incidents… through the construction, documentation and theorization” of them (ibid). Although
I did not refer to our selection of constructs or classroom practice as critical incidents, I shared Tripp’s view that teachers had to have “control” over the extent of change to their classroom practice, in accord with their personal constructs. My intent in having teachers reflect and report on their experiences of co-construction was to involve them in the process of generalizing. Like Tripp, I sought to work from teachers’ understandings “deeply contextualised in the culture of classrooms and the actions and values of teachers” (p. 152). My role was to document, data analyse, interpret and tell unfolding stories. Participants were encouraged to critique and verify our learning. In this way the teachers’ voice, interactive reflections and interpretations of language planning, influenced co-construction. The stories of Jacqui, Penny, Toni and Maree show the differentiation of these processes for each teacher.

Teacher voice

The interactive process of co-construction relied on the exchange of teacher and researcher voices. Interaction could not be occasional or limited to the sharing of classroom time and teacher interviews. Rather, the continuous and reciprocal identification of strengths and needs in thinking about classroom practice became a scaffold for the co-construction of pedagogy.

One teacher reflected how the bringing together of prior knowledge, beliefs, experience and practice distinguished co-construction from the “creation” of language development plans. This teacher said, “the parts are already there and you’re building something together… ‘creation’ would be new thought, new parts. The parts are already there. You use the parts in the right way. All the theory is already there” (CBRD23/1/03). This teacher’s use of the “right way” was discussed. We clarified that ‘right’ in this context meant an appropriate and acceptable practice for the given context. It does not imply a single correct response.

An essential part of the co-constructive process was the intentional use of each teacher’s personal lens of prior belief, experience and practice. Personal perspectives determined the selection, knowledge, innovation, development and review of links to planned change. Participants’ voices needed to be ever-present to provoke, consider,
suggest, select, reject or decide to implement appropriate language development practices. Teacher voice described change in teachers’ thinking and practice. By definition, the co-construction of language development plans required that my voice was also heard, that all participants were both learners and teachers. Teacher voice facilitated my interpretation of teachers’ reflections on our experiences.

During the four school terms of this project, teacher voice provided a way of knowing how individual teachers construed issues in our planning and whether our co-constructed classroom practice was acceptable and appropriate to them. Teachers’ input to co-constructed practices and their responses to my input also provided a way of monitoring teachers’ awareness of, and interest in, current oral and written language pedagogy (CBRD30/11/00; CBRD6/12/00; CBRD7/12/00, CBRD11/12/00). New or alternative classroom practices needed to be acceptable for all participants. Teachers will reject recommended practice, when it is appropriate to the classroom in question but not acceptable to their current constructs (T2TDI290).

I argue that co-construction can challenge, extend and develop one’s zone of actual development (ZAD) when the co-constructive partner provides acceptable support and encouragement. The zone of actual development is defined by Wilhelm (2001) as what one can do alone, without any kind of assistance. In this study, as in other classrooms, teachers working in their ZAD may or may not accommodate the strengths and needs of students at risk in their classrooms. Co-constructive partners acknowledge each participant’s zone of actual development and aim to work within a shared zone of proximal development (ZPD). Each person’s zone of proximal development is recognized by tasks they can do with a more expert person’s help. When one is given a task s/he cannot do, there is teaching opportunity, the chance to support the learner through his/her zone of proximal development to a new zone of actual development (Wilhelm, 2001). It follows that the teacher’s voice was essential when deciding what could be achieved in this Language Development Project.
Metacognitive processes and interactive learning

Wilhelm’s (2001) premise for interactive learning is applied to co-constructive contexts, “The most important thing we can teach (each other) is how to learn” (p. 6). Wilhelm confirms the importance of learners “actively using procedures to construct understanding” (ibid). Co-construction provides an active process by which adults interact with, and learn from, one another. Wilhelm specifies how speech forms work as metacognitive tools for learning. He links Vygotsky’s concept of cognitive learning zones to social, private and inner speech to show how each “speech form” assists the transition from actual, to proximal, to new actual zones of development. In this study, participants were both teachers and learners, co-constructing their learning and teaching others.

Attention to social, private and inner speech in interactive learning is another way to interpret co-constructive processes. Wilhelm (2001) regards social speech as a means of sharing discussion about the processes of learning, as well as, a tool for sharing “language and activity” (p. 11). Social speech was used regularly to co-construct the thinking and practice for language development plans in this study. Social speech can be recognized in the template of co-construction used to interpret teachers’ experiences. Social speech was used to:

(a) Consider alternative theories of language-based educational risk and language teaching-learning strategies,
(b) relate alternative theories and strategies about language teaching –learning to participants’ prior experiences and beliefs,
(c) reconstruct understandings for future teaching-learning possibilities,
(d) negotiate aspects of alternative thinking /practice specific to language-based educational risk, acceptable and appropriate for particular classrooms, and to
(e) co-construct theory and practice specific to language-based educational risk as necessary.

Social speech acts as a scaffold for participants to move from their individual zones of actual development towards a zone of proximal development.
Private speech is described as the language of self-control (Wilhelm, 2001, p. 11). It is a means of self-cueing or decision-making, linked to transitions from supported learning (in the ZPD) towards independent teaching or learning. Wilhelm uses examples from literacy teaching to illustrate how children become able to select and use strategies previously defined, explained, modelled and reinforced. In doing so the learner uses language for self-teaching, to make new or tacit understandings explicit. Private speech is included in the co-construction template when teachers:

(a) Reflect on the adequacy of their personal theories about language-based educational risk for current students,

(b) reflect on their repertoire of language teaching and learning strategies with which to respond to perceived educational risk in their students, and

(c) identify gaps in their current repertoire of oral and written language teaching-learning strategies for students they teach.

The importance of private speech also distinguishes co-construction from collaboration or consultancy. Private speech is used to reflect on, and select, constructs and prior learning (personal beliefs, experience and practice) as contributions to co-construction. Whereas social speech can assist the recognition and selection of constructs and practice, the self-teaching function of private speech defines individuals’ contributions to co-construction. Private speech equips participants to work within a shared zone of proximal development as both teachers and learners. This is co-construction.

The third form of speech discussed in Wilhelm’s (2001) Vygotskian model is inner speech. It is described as a type of self-dialogue “that is the essence of conscious mental activity” like an “inner verbal thought” or self-regulation (p. 11). Wilhelm’s learners used inner speech to transform new explicit understandings to new zones of actual development. In this study teachers developed new constructs of early childhood development and used new classroom practices independently. Their new and unique ways of seeing language-based educational risk and language development practices through personal belief, experience and practice were made conscious by inner speech.

Teachers’ inner speech was interpreted through their actions. They chose to:
(a) accept, reject or ignore alternative thinking or practices specific to language-based educational risk in their early childhood classrooms, and

(b) select and implement explicit language development practices for students in their early childhood class (not only those at educational risk).

In the stories that follow, teachers’ inner speech is heard as personal reflections as they reviewed, selected and interpreted constructs of oral and written language development for future use. Participants understood how they had co-constructed change through zones of actual, proximal and new actual development. Participants could access new zones of actual development as teachers and learners.

This metacognitive awareness of change was a common outcome of co-construction. Next, reflections from Jacqui, Penny, Toni and Maree, reinforce the influence of participant voice and interactive learning on the effective co-construction of classroom language development practices. Despite the diversity of needs and intended outcomes of teacher-researcher pairs, teacher voice and interactive learning processes are shown to be influential factors throughout this study.

**Jacqui’s story**

Jacqui’s story so far has included her identification of the need for more specific language assessment skill and greater confidence to identify and manage children at educational risk in her classroom. Given this level of awareness of her own needs, Jacqui may have been suited to a learner-centered, teacher support model. Her story is continued to explain her engagement in co-construction and to show how she reviewed her constructs of educational risk with several others. Jacqui initiated discussions with school staff about contentious issues arising in the project year (CBRD4/5/00). She began to act as an agent of change for, and with, her peers. I had not predicted that Jacqui would embrace this proactive role in the study year.

One example of Jacqui’s commitment to addressing teachers’ thinking and practice relates to student placement. Jacqui objected to being asked, in semester one, to nominate students for retention at Kindergarten level into the next school year (CBRD4/5/00). She was concerned that semester one was too early in the school year
to make these judgements (ibid). She perceived that teachers’ constructs of benchmarking and outcomes-focused education varied widely. Jacqui sought to review her constructs of outcomes-focused education and year placement for students at risk with others and me. She and I agreed that although most teachers held a construct of “typical attainment” for each school year level, benchmarks were recommended minimal standards for entering a subsequent year level. Benchmarks did not equate to “cut-offs for (students) to pass or fail each year” (CBRD4/5/00). Instead we expected to address students’ strengths and needs via individual education plans and a differentiated curriculum.

This issue of year placement for students at educational risk arose several times during the research year. Jacqui and I were confident and able to make language planning decisions independently but chose to co-construct a view of students at educational risk for students we shared. This view included constructs of explicit language teaching (Rohl & Rivalland, 1999) towards specified educational outcomes, for students with language-based educational risk. Our co-construction clarified classroom language planning and our respective tasks and responsibilities. Together we achieved language outcomes that we were unlikely to have achieved alone (CBRD8/5/00).

Jacqui influenced the co-constructive process in several other ways. For example, she recommended changing the schedule of explicit language development activities for her students at educational risk. Despite her initial requests for in-class language development support, Jacqui requested that students were grouped for language development tasks outside her whole class teaching time. This rescheduling allowed Jacqui to become more actively involved in explicit language development practices for her students at risk. She discussed how classroom factors such as noise and visual distractions impacted on the learning of different children in different ways (CBRD14/8/00, CBRD15/8/00). Her rescheduling of language development time was to enhance her own learning and, therefore, the students’ learning outcomes.

Jacqui made requests, contributed initiatives and reviewed her needs during this study. She frequently contributed her personal voice to this project, expecting to interact with teaching peers, including me (CBRD16/5/00). She requested language
planning meetings as needed and reported concerns, achievements and areas for further co-construction (CBRD2/11/00). Jacqui’s personal constructs initially focused her co-constructed planning to students at educational risk in her classroom but she also expected to apply co-constructed thinking and practice to whole-class language teaching (CBRD20/11/00). She discussed the idea of repeating small group language activities during whole class mat sessions (CBRD2/11/00) and applying speech-language strategies, planned for individual children, to other children with similar needs (CBRD7/11/00). At the end of the project year Jacqui identified her enhanced understanding of oral language components in educational risk as one outcome of co-constructed language planning. She included new and explicit language teaching and learning strategies into her whole class program and was planning for 2001 on the basis of her changed thinking and practices during 2000 (CBRD20/11/00).

Jacqui’s story is significant from another perspective. It shows her insights into teachers’ learning. She stressed the need for teachers to become familiar with specific language teaching strategies so that they became part of the teacher’s automatic repertoire. She reflected on written summaries of strategies and activities that we had planned and used together. Jacqui filed and referred to the planning and activity notes that summarized our classroom language development program during the year. She referred to particular strategies for eliciting speech sound production in young children (TKJDI119-120) as having been helpful for all of her students. She focused on teachers’ responsibility for their own professional development. “The teacher just needs to take it on board to learn” what they need to know (TKJDI129).

Each participating teacher was interviewed in Term Four 2000. The questions used as a basis for the informal interviews are given in the latter part of Appendix F. The data item (DI) numbers for final interviews continue on from the data item numbers used in initial interviews. For example, Jacqui’s initial interview is coded as TKJDI1-91. Her final interview is coded as TKJDI92-129.

During her final project review interview Jacqui chose to discuss her parent intake survey for the following school year. She talked about the specific student data we had collected during the project year and suggested modifying the survey questions
so that all of the information was meaningful to her (TKJDI92-94). We went on to discuss the parents’ positive perceptions of Jacqui’s involvement in the Language Development Project and their varied responses to the OWLD summaries shared each school term. We exchanged parent feedback about our Language Development Project and agreed, “The parents have said they’ve learnt to understand the kids much more through the informal discussion… and by actually working together” than from written reports (TKJD113). Jacqui commented on the value of both written information and shared activities (TKJDII14-116). Her opinion was that the combination of written reports and parent involvement in planned language development sessions allowed parents to share responsibility for the language learning outcomes of students at educational risk.

Teacher interviews were used to probe teacher opinions on the value of co-constructive processes, as well as, changes to their thinking and practice about early childhood language development. Processes for facilitating change in teacher (and researcher) thinking and practice were not referred to as co-construction during the project. However, a Research Diary entry from Term Four indicates an attempt to name the kind of “partnership” that had developed through shared planning with teachers. (CBRD31/10/00).

Teachers had opportunities to provide written feedback on the Language Development Project each school term, during individual interviews, during the Staff Review Workshop (data triangulation session) and at a Professional Development-Evaluation workshop in Term Four. The latter was a formal opportunity for teachers to evaluate the Language Development Project. Informal reviews of the LDP occurred during weekly language planning sessions with individual teachers.

The Staff Review Workshop, facilitated by two university staff members (SR4/9/00) probed teacher thinking and practice, as well as, the content and processes of the Language Development Project. All participants were told I would access the audiotapes and reviewer notes. Data collected by the visiting researchers matched that elicited at the evaluation workshop in Term Four (E21/11/00). All teachers had verified their selection and implementation of classroom language development strategies during the course of the project, at the Staff Review Workshop and at the
Evaluation Workshop. In this way my interpretations of teacher data were triangulated.

At the Evaluation Workshop, participant teachers were asked also, to report on whether or not they felt able to select and implement appropriate language development practices for students at risk in future early childhood classes. I was interested in gaining further insights into teachers’ levels of self-confidence and perceived expertise beyond the term of this project. This written review probed teacher’s perceptions of durable changes to their classroom practice as an outcome of the Language Development Project.

Project data illustrate the diverse ways that participants contributed to interactive learning during the year. Teacher stories show the various ways that teacher voice was elicited and used to inform further co-constructive planning. In her review, Jacqui gave three examples of interactive learning that she valued. These were:

1. Observing and participating in small group work.
2. Shared mat sessions, during which Jacqui and I planned and taught explicit speech-language skills and tasks.
3. Notes and discussions. (TKJE21/11/00).

At the end of the research year Jacqui’s context-specific, thick descriptive story responded to each research question. Jacqui’s personal constructs (based on prior beliefs, experiences and practices) determined her pedagogy. Her constructs and classroom practice were further shaped by co-constructive language development practice. Furthermore, Jacqui’s attention to teachers’ responsibility for their own learning and her deliberate interaction with contentious issues, were noted. Jacqui’s reflections implied that teachers who confidently contribute a voice to co-construction, and who expect to interact with others to clarify teacher thinking and develop practice, may be agents for co-constructing change within their schools. Jacqui had begun that process.
Penny’s story

By contrast, Penny began the research year with a reputation as a confident and proactive teacher (T2TDI213). She spontaneously voiced her expectations, input and responses to the co-constructive process, believing that she could match her needs as a learner to the demands of her classroom. Penny clearly expected learning to be interactive. She and I interpreted one another’s strengths, needs and opinions relatively effortlessly. We knew from our previous working relationship that we were compatible as co-constructive partners. In addition, Penny understood my task to facilitate change in teacher thinking and pedagogy (CBRDWeek4, Term4). In this sequel to her story, she reflects on ways to consolidate co-construction processes. Penny represents teachers who contribute to effective co-constructed partnerships.

In many ways, the co-constructive partnership Penny and I developed, matched Tripp’s (1993) model of collaborative teacher-researcher partnerships. Tripp posits that the “value for both parties should be mutual and symmetrical” but that the particular contributions and outcomes from shared projects need not be identical. Indeed, he states, “it is the very difference between contributions and expectations that make collaboration so strong methodologically” (p. 149). He recognizes benefits in teachers making “their own choices (as) active researchers and self-reflective interpreters of their own practice and situation” (p. 151).

Tripp’s (1993) comments also clarify “many different forms of collaboration” (p. 148). I acknowledge the potential of collaborative working relationships but am aware that collaboration with experts is often a misnomer for their direction of teachers’ practice in schools. Tripp’s clarification of collaboration has much in common with co-construction processes. (See his five points of agreement for researching collaboratively in Chapter 5, p. 158.) As in the current study, Tripp identifies teacher gains “in the form of improved practices and understanding of their teaching, while the researcher gains data for theorizing schooling and teacher’s practical knowledge” (p. 151).

Penny acknowledged her improved practice and understanding as outcomes of this study. Her written feedback confirmed her confidence to independently select and
implement language development strategies for her students in the future. She reported feeling able to select appropriate ideas and to “identify problems and/or questionable problems” (T1PE21/11/00). Penny also reported her intent to implement language development strategies with other children (not at risk) because she could “see the benefits” (ibid). Penny assisted my theorizing about co-construction as a process for effecting change in teachers’ practical knowledge and for school-based teacher support systems (T1P7/12/00). She specified two features as “most useful” in this study:

1. The support and assistance.
2. “The great information and the way it was presented” for classroom use (T1PE21/11/00).

Penny influenced our partnership by making clear requests, clarifying and monitoring my involvement in her classroom planning and practice through the project year. Indeed she showed me “where she wanted to take me”.

During school Term Three, Penny’s growing expertise and confidence with co-constructed language development carried over to her relationship with the school support teacher, Karen. At this time, Penny and I were co-constructing whole class, small group and some individual language development goals and activities. Although we taught together we did not necessarily teach in the same way (CBRD22/8/00). We recognized that individual teachers use similar strategies for different reasons with different outcomes, and that our reflections on shared teaching could be influenced by our personal constructs. Together, teachers Penny and Suze requested that the support teacher provide in-class support for their children at risk, related to their classroom teaching program, rather than withdraw students for language support.

Penny explained that attempts to set times for classroom-based support and to specify expectations for individual students with the support teacher, had been unsuccessful (T1PDI251). She expressed frustration that the support teacher did not meet her expectations to select and implement appropriate language development strategies or suggest classroom strategies for students with language-based educational risk (ibid). Later in the study year Penny shared ideas for improving her partnership with the support teacher. They included setting time to better understand
one another, to develop a shared view of the support program for students at educational risk, to negotiate their roles, to exchange information about how each of them worked with students at risk, and to program together (T1PDI250-258). Reflecting on teacher partnerships, Penny added that knowing the other teacher and his/her prior specialist experiences could be helpful (T1PDI259). Penny valued personal constructs, teacher voice, interactive learning and co-constructive processes.

By the end of the year Penny was concerned about supporting the teacher who would replace her. She specified her intent to offer support to others, rather than prescribe thought and practice. She reflected on her experience as a graduate teacher who needed “something to work from” (T1PDI220). Penny valued our documentation of classroom practice, referring to multiple data sources to develop language plans. For example, she used the Literacy Net (1999) class profile sheet and individual student profiles. She also read, filed and referred back to Language Development Project classroom records we used to document our co-teaching. Penny acknowledged the usefulness of information from specialist sources (T1PDI228-229) to develop individual education plans (IEPs) for students at risk.

Penny contributed her thoughts, experiences and recommendations enthusiastically to our review of the co-construction of language development plans (T1PE21/11/00). We shared alternative views, understood the benefit of different constructs and voiced our preferences for next stage co-planning. I asked Penny how she thought teachers who planned only whole class language programs might be supported to differentiate individuals’ language-learning goals. Penny identified several practical points. Each highlights the importance of developing the teacher’s thinking within the classroom context using co-construction processes (T1PDI139-242). A summary of Penny’s suggestions follows.

1. Respond to a teacher’s identification of weak students by examining work samples together.
2. Agree on a focus. For example, “you’re not worrying about how neat it is, you’re worrying about (whether the child) can spell, or… sound out.”
3. Explain an assessment to the teacher. For example a phonological awareness assessment or “something that pinpoints language problems.”
4. Give the teacher the opportunity to do the assessment.
5. Explain the implications of an identified problem so the teacher can “gauge where they need to go with that child.”

6. Identify a starting point from which to form goals. (T1PDI239-242).

I added recommendations about the importance of being sensitive to the teacher’s self-perception of his/her expertise and confidence, to deal with students at educational risk. Additional strategies for starting to work co-constructively follow.

7. Identify current classroom practices that can be continued or used by other adult helpers (eg. Teacher Assistants or volunteers).

8. Identify current whole group strategies that can be used with individual students, used more often or changed slightly to accommodate the strengths or needs of students at educational risk.

9. Begin to co-construct IEPs using existing classroom practice rather than new pedagogy only.

10. Identify participants’ personal constructs related to classroom language development and the potential role of the classroom teacher with students at risk.

We discussed the idea of classroom teachers and language specialists sharing responsibility for students at educational risk. Penny considered that classroom teachers, language support teachers and parents did not necessarily share one view of their respective roles in managing students at educational risk. She stated, “That’s a problem because if they believe that (students at risk are not their responsibility), we can’t make them” take responsibility (T1PDI245).

Penny reflected on her experience of interactive co-construction for her input to the Staff Review Workshop in Term Three (SR4/9/00) and her final interview in Term Four (T1P11/12/00). She gave examples of successful teaching using whole class, small group and individual language development strategies. Penny compared her Year 1 classes of 2000 and 1999 to highlight the positive outcomes of Language Development Project strategies developed during the year 2000. She attributed her improved teaching outcomes, with the more difficult class to the support she had received in planning and managing whole class, small group and individual language learning (T1PDI172-173).
Researcher interpretations

Penny’s story does not represent all teachers. Her voice was strong, her message clear and influential. Her interactions were intentional, enthusiastic and reflective. Our partnership worked. Like Jacqui, Penny contributed thick, descriptive data to illustrate links between teachers’ personal constructs and classroom practice, influential factors in co-construction and the implications of co-constructed language development plans for classroom-based language support services.

The stories of Jacqui and Penny represent co-constructed outcomes for teachers who were intentionally and enthusiastically involved, the gourmet omnivores of this action research (Joyce & Showers, 1988). They reinforce the potential of co-constructive language development practices in schools and indicate that positive outcomes from one co-constructive partnership encourage the pursuit of others. Jacqui and Penny believed that co-construction was applicable and appropriate to their needs as classroom literacy teachers. They accepted responsibility for their own learning and expected to contribute to the culture of learning for their teaching peers (including me, as a teacher-researcher). Despite Jacqui’s challenges when addressing contentious issues with her peers, and Penny’s dissatisfaction when working with particular peers, both teachers demonstrated a persistence and commitment to co-construction with others. These characteristics contributed to my positive experiences of co-construction. Jacqui, Penny and I accepted that the personal effort required for continuous and intentional co-construction was worthwhile.

By contrast, the stories of Toni and Maree are powerful representations of the potential for co-constructive language development planning when teachers are not initially accepting of the content or processes of co-constructed practice. These stories contribute to later conclusions about the implications of co-constructive classroom-based language support services in other educational contexts. Both stories demonstrate the importance of reciprocal voices and reflective interaction as ways to improve co-constructive outcomes.

Earlier anecdotes have illustrated Toni’s and Maree’s doubts about the potential of co-constructed language development planning to meet their particular classroom
needs, despite their voluntary participation in this action research. Both stories show how I learnt about using reciprocal voices and continuous interaction to repair, as well as, develop, co-construction. Repairs were required for different reasons in each partnership. Toni’s story details how continuous listening empowers participants to learn to work together over time. Maree’s story details how interaction is enhanced by shared reflection on both the content and process of co-construction. Maree’s Term Four reflections on the Language Development Project were not as I had predicted. Without sharing our reflections and interpretations, reported outcomes would have been limited to my personal and inaccurate views of Maree’s co-construction experience.

**Toni’s story**

Previous discussion clarified that Toni and I began the year with very different views of our potential working relationship. Toni disclosed particular concerns about her inability to identify children at educational risk and her limited experience of early childhood language development (T2TDI132-139). She was equally direct about her perception of my participant researcher role:

> We need someone like yourself (with) the expertise to tell us, ‘That’s the problem’ and once we know what the problem is then you can give us strategies and we can do something about it. If you’re identifying them then you’re telling us what the child needs (T2TDI194-196).

One point of initial incompatibility was Toni’s request for a list of “ten to fifteen strategies” to use in the classroom (T2TDI222), while I expected that we would work together to identify students at risk, plan and implement classroom language development strategies as co-teachers. Yet as I listened to Toni, I came to understand that she was requesting an information-centered, rather than an interactive model of working together. Toni believed that expert opinion was required to identify students at risk (T2TDI203-209) and that experts needed to pass information on to teachers, in a useable form (T2TDI289-290).
Gradually, I came to understand that Toni’s unfamiliarity with interactive learning models was not, as I had interpreted, a rejection of the content and process of co-construction. Her requests for information were confirmation of her willingness to accept my recommendations because she trusted and valued the information I shared. Toni did not perceive herself as someone who could decide which aspects of her classroom language development practice to change. She regarded decision-making as my role (T2TDI194-196). However, once we negotiated how our shared classroom practice would begin, Toni assumed an increasingly active role in our partnership. She accepted my need to work in the classroom in order to make links between children’s language-learning difficulties and the whole class program. Toni agreed that children could be supported in-class “with structure and a set routine” (T2TDI198). She was frequently reflective about ideas and practices that worked, or didn’t work for her. Much later in the year, Toni reflected that our reciprocal roles in the classroom promoted our “teamwork” and ensured that our ideas and practices were linked and relevant (T2TDI200).

Toni’s final interview comments about our working relationship were interpreted with Vygotskian principles. Toni discussed at some length her experiences and ideas about teachers as learners, emphasizing teachers’ need to work with people who know more than they do about particular learning areas. She was clear that visiting experts who “know all the theory and give pages of written recommendations” were not valued (T2TDI228). Her view of working together was that the teacher’s support person is the “next level up” in expertise from the teacher and s/he brings that expertise “into the classroom, to make it practical” (T2TDI227-229). Here, Toni’s opinions are paraphrased from her explanation of incidents in which she had (and had not) been supported to develop new classroom practices. Additional examples are documented in Toni’s interview records (T2TDI248-252, T2TDI254-256, T2TDI267-269, T2TDI283-285).

Toni’s summary comment, “You have to live through something before you can put it into practice’ (T2TDI235) clearly communicates her experience of learning to change her pedagogy. I use this particular quote to capture the continuous and interactive features of co-constructive practice and to emphasize how different co-construction is from consultative or collaborative planning between language
specialists and classroom teachers. Co-construction is the on-going process of working together to translate shared theory to effective practice (and vice versa).

Toni’s final interview also clarified changes in her professional confidence as an outcome of the Language Development Project. Toni discussed children’s characteristics of language-based educational risk using information we had shared earlier in the year. She remained cautious about her ability to identify students’ educational risk (T2TDI204) but expressed greater confidence in her ability to make decisions about classroom practice, once characteristics of educational risk had been identified (T2TDI205). By Term Four, Toni had become accustomed to learning with rather than from me. We used information-centered, learner-centered and interactive learning processes at different times. Toni believed that co-construction would enable her, “like Penny” (T2TDI213), to develop greater expertise with early childhood language development.

Toni specified changes in her thinking about the importance of oral language in primary classrooms, practices for teaching editing of written language, her improved understanding of spelling and ways to teach spelling to young learners (T2T6/12/00). She reported that her LDP involvement had benefited her whole class teaching, as well as, her response to students at risk (T2TDI224-225). With each example, Toni stressed her preference for ideas to be demonstrated or recommended as classroom practice, rather than discussed as principles of teaching and learning. During the staff evaluation, she focused on her learning about “strategies for parents and teachers in reading, writing, spelling and oral language activities” (T2TE21/11/00) and the importance of the teacher workshop for peer sharing.

Toni’s story also taught me about interpreting qualitative data during action research. I reflected on why I had initially tried to lead Toni to where I thought she “needed to be taken”. Toni showed me that her familiarity with information-centered learning was her way of seeing our partnership. By understanding this preference and listening to Toni’s practical reflection on the strategies she tried, we gradually built a partnership that was co-constructive in nature. When asked about the importance of teacher choice during her final interview, Toni stressed the importance of flexibility, suggestion (rather than direction) and choice in successful partnerships. She
reminded me, “it’s up to the teacher to decide how they want to do it” (T2TDI262). Her view of teacher-researcher partnerships and strategy sharing was, “If it works, people will do it” (T2TDI259).

As I became attuned to Toni’s way of selecting, trying a strategy, commenting on its effectiveness and showing readiness for another, I came to know when she preferred a new idea, to be encouraged to continue with current practices, to be challenged to problem solve, or to reflect on the content or processes of language planning to date. This development could be interpreted using Loucks-Horsley’s (1996) application of the Concerns-Based Adoption Model (CBAM). Loucks-Horsley believes that supporting teachers through change is essential for learning to “take hold” (p. 1). She (1996) notes, “people considering and experiencing change evolve in the kinds of questions they ask and in their use of whatever the change is” (p. 1). Her sequence of questions, from self-oriented, to task-oriented and finally impact focused, is similar to that used by Hall and Jones (1976).

Over one school year, Toni’s questions were less sequential but included concerns about herself as a teacher, classroom tasks and learning outcomes. Toni’s view of co-construction was a flexible one. She needed to move between ways of learning and teaching depending on how familiar and confident she felt with a particular language planning issue. Over time, Toni specified aspects of co-construction that worked for her. She wanted to be given a range of strategies to try in response to a presenting language need. She wanted also to choose the strategy she would try (T2TDI263) and not be told, “This is what you do” (T2TDI285). One exception was Toni’s request for direction in the first few weeks of the following school year. She anticipated that making decisions about students’ language needs early in the school year was difficult and that each year she didn’t “know where to start” (T2TDI281). Her solution was for someone with greater expertise to make those decisions. Toni recommended, “Just point and say, “This is the direction you go” (ibid).

Through this study year, Toni and I learnt to talk and work together; to keep listening to one another and interacting in the classroom until we were both satisfied that our way of co-constructing language development practice worked for us and for our students. The use of social speech (Wilhelm, 2001) was particularly important when
working with Toni. If I was unsure about Toni’s intent or needs, I discussed and rephrased her meaning with classroom examples, to determine whether or not we had established a shared zone of proximal development. When Toni’s need for information, choice, or co-teaching mismatched with mine we renegotiated our content and/or processes for learning. Toni and I worked continuously to make co-construction happen. Finally, my interpretation of this experience, and Toni’s reflection on it (SR4/9/00; T2TE21/11/00; T2T6/12/00) confirmed the importance of participant voice and negotiated interactions. We continued to listen to one another to build and repair language plans and to ensure that co-construction ‘worked’ for us.

**Maree’s story**

Maree’s story is the final one to be continued and interpreted. It is chosen to reiterate the importance of data selection in qualitative educational research. Maree’s story enhanced this research by providing an alternative insight into the thinking and practice of early childhood teachers and contributing data for the analysis of breakdown in co-constructive relationships. Action research method and structured narrative reporting accommodated Maree’s story as a valuable, albeit dissimilar, representation of co-construction processes.

For some time I considered deleting Maree’s data from this structured narrative because she had participated for the last semester only. Although I had less data from Maree than other teachers, the thickness of her data proved to be more important than the quantity of it (Bassey, 1999). Similarly, Fehring (1999) argues to retain inconsistent data in qualitative research. Teachers’ stories “may be similar or dissimilar, redundancy and variety each having voice” (p. 41). Analysis and interpretation of Maree’s story (with her) increased my understanding of unsatisfactory aspects of our partnership.

In earlier chapters I concluded that Maree and I needed more time to share “our ways of seeing the world” (Wadsworth, 1997, p. 11). Simple as it sounds, Maree and I thought we had constructed a shared view of early childhood language development during our previous working relationship. We thought we had reviewed shared constructs through informal discussion prior to Maree’s return to school. Yet our
attempts to co-construct language development practice demonstrated that we had not adequately established shared constructs or identified shared zones of proximal development. Instead of setting the scene for interactive learning, our partnership began as a one-sided process.

In the second week, Maree stated that she did not “need help” with oral language activities in her classroom, that language development sessions could be reduced to one session per week and that two of the students at educational risk needed to be referred to speech pathology services rather than participate in the Language Development Project (CBRD20/7/00). Here was a cue for us to review our constructs of early childhood classroom language development practices and to learn about our strengths, needs and preferences as co-constructive partners.

In retrospect, at this point our potential for co-construction was replaced with an awkward partnership, temporarily controlled by Maree. Driven by my belief in the need for teachers to make choices and input to classroom practice decisions, I accepted Maree’s decision-making role while reflecting on how to encourage more interactive processes, how to repair our partnership and facilitate interactive learning. Since I did not voice my unease with Maree’s dominant role, she was encouraged to think that I could adopt her constructs of early childhood language development. My relationship with Maree was unlike any I experienced with her peers. I needed to understand why. Term Four data was helpful.

Recall that Maree and I had needed to “reconstruct” our working relationship after understanding that practices co-constructed with the previous teacher, Peta, could not be transferred to my partnership with Maree. We learnt that we had to co-construct our shared pedagogy by acknowledged our contrary opinions of speech-language-hearing development in the early years (CBRD13/9/00), our disparate views of parent involvement in early childhood classes, and our common interest being the best learning outcomes for our students. During Term Three, Maree and I shared occasional planning discussions, parallel classroom teaching time, participation in early childhood and whole-staff meetings. We were not co-planning explicit classroom language development practices or co-teaching, as I was with other teachers.
However, the relocation of the language development group enabled Maree to observe my thinking and practice without necessitating change in her current classroom practice. Maree and I could commit more time and attention to exchanging and validating our thinking. Maree changed her perception of the parent participants, as committed and capable facilitators of child language development in the early years. We began to discuss ideas for classroom language development.

Maree’s Term Four interview was presented as an opportunity to reflect on our attempts to co-construct language development plans and to critique co-construction processes and outcomes. Perhaps the interview format prompted us to reflect on the potential of our thinking and practice. Maree’s Term Four interview facilitated a lengthy sharing of oral and written language theories and practices (TPMDI14-16). Both Maree and I contributed examples of our thinking and practice specific to news telling, the physical set-up of the early childhood centre, children’s ability to make choices, the amount of structure in early childhood programs, ways of explaining activities to young children, speech-language characteristics of children at risk, the role of parents in supporting children at risk, and links between the whole class program, home reading and parents’ roles in early childhood education (TPMDI36-43, TPMDI49, TPMDI58-65). We came to appreciate how our individual “interests and values” (Wadsworth, 1997, p. 11) influenced our thinking and practice and helped to explain differences in practice between teachers. This final interview was also an opportunity to discuss examples of the co-constructive processes used with other teachers in this study (TPM7/12/00, side B).

During the final term of the Language Development Project I considered that Maree and I had not reached our potential as co-constructive partners. I anticipated Maree’s negative written feedback on her co-constructed experiences. Wadsworth (1997) cautions against researchers assuming they have understood other’s ways of seeing the world and not being sceptical of interpretations. I had not predicted that Maree’s reflective data would show her regard for the co-constructive experience as beneficial to herself and her students. She particularly commented on her learning about the way I interacted with students at educational risk and her intent to use some of our shared classroom language development practices in the future.
By the end of the year Maree and I had both benefited from our partnership, but in different ways. I was prompted to review the templates for co-construction (in Chapter 5) to recommend that teacher-researcher partnerships begin with the reciprocal sharing of personal theories about language-based educational risk in addition to private reflections. Theoretically, the use of private speech creates an opportunity for adults to decide whether or not they perceive a need for change in their thinking or practice (Wilhelm, 2001). Social speech facilitates our understanding of co-constructive partners and ourselves in that partnership.

Unlike my beginning with other participant teachers, Maree and I did not have opportunity to reflect on our personal theories and discuss our observations as we shared a new class of students in the first month of a new school year. Instead, Maree returned to her new class of children, whom I knew, had planned for and had worked with. Inadvertently, she may have felt an obligation to accept my interpretation of students’ strengths and needs rather than form her own. Alternatively, Maree and I could have begun our partnership with the reciprocal sharing of our constructs and private reflections. I could have modelled my reflection on personal theories about language-based educational risk for particular students, and my need for constant review and changes to thinking and classroom practice over time. If I had also clarified Maree’s constructs of early childhood language development as applied to our shared class, I might have encouraged both reciprocal sharing and private reflection early in our partnership.

Modelling facilitates “shared language and activity” about the topic in focus within learners’ zones of proximal development (Wilhelm, 2001, p. 11). On reflection, I understood that the initial weeks of participant observation had provided other teachers and myself the opportunity to use both social speech and private reflection on our personal theories, specific to each new class. Maree and I needed to do this. I knew the class but not Maree’s constructs of it. Maree and I knew one another but not in the particular context of this class. Such experience of the importance of context for the prediction of outcomes is discussed by Flyvberg (2001) as one of the great challenges of social science research.
This experience illustrated that the content and processes of co-construction need to be reviewed through continuous language and activity with each co-constructive partner. Beginning co-construction with the active clarification of reciprocal understandings helps to identify partners’ respective zones of proximal development. Co-construction with Maree was compromised by our initial lack of clarification of respective constructs and our need to identify a shared zone of proximal development. (Perhaps this is also what happens when consultancy and nominally collaborative processes become dysfunctional.). Typically, it is the social sharing that provokes personal reflection and metacognitive awareness of the need or possibility for co-constructed change.

Working with Maree provided significant opportunities to reflect on and learn from dysfunctional co-construction. I revisited the data collected with Maree to interpret factors emerging as recommendations for effective co-construction:

1. Continue to seek and value reciprocal input.
2. Continue to recognize the strengths, needs and preferences of individuals.
3. Schedule regular time for reflection and review of the content and process of co-construction.

My interactions with Maree, her data and interpretations were unique because they prompted further review of the developing template for co-construction processes.

Unlike my experiences with Jacqui, Penny and other teachers, language planning with Maree had been characterised by unequal contributions and outcomes that were not valued in the same way by each of us. The failure to establish shared zones of actual or proximal development had prevented effective co-construction. During our semester together, we came to recognize the need for change to the content and processes of our language development planning. Eventually, opportunities for continuous and reciprocal sharing of our personal constructs of early childhood language development and classroom language development practices allowed us to begin to repair our co-construction.
Influences and outcomes

Discussion, examples and teacher reflections have shown the importance of eliciting teacher voice and promoting interactive learning when supporting teachers. Teacher voice and interactive processes influenced the content, process and outcomes of co-constructed decisions throughout the research year. Despite the range of constructs, experiences and processes of co-construction, Term Four data confirmed that teachers engaged in meaningful and productive co-construction of classroom language development plans. Each of us could be heard as co-constructive partners. We found ways to develop and repair co-constructive processes, as required.

Empirical data now support minor amendments to analytical statements (AS6 and AS7). Teacher stories provide examples of how early childhood teachers’ confidence in their personal theories of child language development and language-based educational risk encourages their identification of children “at risk” in their classrooms (AS6b). Other examples indicate that early childhood teachers’ perceptions of themselves as having developed language expertise encourage their identification of language-based educational risk in their students (AS7b). In summary, teachers’ increased awareness of how they have made a difference to children’s language development encourages their further learning.

Teachers reported increments in their expertise as a result of our explicit, continuous planning and our implementation of strategies for children at educational risk in early childhood classrooms. Teacher reflections verified the claim that learning results from “meaningful and productive shared activities” (Wilhelm, 2001, p.9). As the action research focus turned to determining influential factors in co-construction processes, teachers’ perceptions of self were embedded in change processes. Teachers’ descriptive stories confirm how each of them influenced the co-construction of language development plans to ensure that classroom outcomes were acceptable and appropriate to them. Teachers’ final reflections on study outcomes related to how well their classroom needs had been met by involvement in this study.

Collectively teachers’ data supported the analytical statements applied to Term Two, Three and Four data. Co-constructive language development planning can:
- enhance the significance of language components in teachers’ personal constructs of educational risk. Analytical Statement 8 (AS8)
- shape the specificity of oral and written language links in teachers’ personal constructs of educational risk. Analytical Statement 9 (AS9)
- shape teachers’ understandings of oral and written language profiles as part of their personal constructs of educational risk. Analytical Statement 10 (AS10)
- facilitate teachers’ independent use of explicit language development practices in response to language-based educational risk. Analytical Statement 12 (AS12)
- shape teachers’ confidence in selecting and implementing classroom language development practices in response to students at educational risk. Analytical Statement 13 (AS13)

Terms Two, Three and Four data also substantiate our learning about the selection of content, the development of processes and the need for repair during co-constructive language planning. Data collection, analysis and interpretation across one school year indicate that co-construction is as a defensible alternative to expert-recipient language support services for classroom teachers.

Teacher voice is regarded as a critical tool in the co-construction of classroom language development plans and the translation of teachers’ understandings about students at educational risk to personal pedagogies. Effective co-construction is characterised by interactive learning during which participants teach and learn together. Indeed, once co-construction processes had been developed, refined or repaired with individual teachers, positive outcomes acted like “hooks on which further learning could be hung”. (This analogy of interactive learning being like hooks comes from colloquial use in early childhood education. I could not locate an original source but have used it here to reinforce the value of the teachers’ voice.)
Here, teachers’ reflections affirmed their engagement in processes and outcomes of co-constructed change. For participants in this study, co-construction became an ongoing process of working together to translate shared theory to effective classroom practice. In the next chapter, the focus moves from teacher stories to research generalizations. Co-construction is presented as a way to establish and develop a culture of learning for teachers in schools. The potential to co-construct change beyond the project school is examined.
Chapter 7

Applications and generalizations from co-constructed change

‘In the end teachers will change schools by understanding themselves’

(Diamond, 1991, p. 120).

Introduction

Responding to the diverse needs of students at educational risk requires teachers to make some transitions from familiar beliefs and practices to less familiar ones. Co-construction heightens awareness of one’s own beliefs, theories, practices and experiences, as well as, those of others. It also provides opportunities to co-construct “experiential understandings;” learning from experience in the context of need (Stake, 1995). In generalizing about the potential of co-construction for effecting such change, discussion moves from the detail of individual stories to discuss patterns repeated within and between them. Of equal importance are exceptions to repeated patterns.

Generalizations about co-construction are linked by the theme that “co-constructed learning enhances teaching”. Classroom teachers have particular expertise created from prior experiences, practice, theories, beliefs and training. In this study, teacher “expertise” is defined as a combination of personal constructs and familiar pedagogy. This definition comes from the theory base given in earlier chapters, analyses of teacher opinion, and researcher interpretations of classroom experiences. In contrast “pedagogy” refers to “the science of teaching” (Concise Oxford dictionary, 1951), the links between teachers’ theory and practice. Gaps in individual teachers’ expertise become apparent when they confront teaching contexts beyond their personal constructs, experience and current repertoire of teaching practices.
Following data analysis and interpretation in previous chapters, data patterns are explored through this chapter. Three generalizations are made from the co-construction of language development practices with teachers, for students at educational risk in early childhood classrooms. They are:

1. Co-construction effects transitions in teacher thinking and pedagogy in early childhood classrooms, in whole class, small group or individual learning-teaching contexts. Since learning and teaching are interactive processes, the co-construction of teachers’ learning enhances their understanding of their teaching and students’ learning.

2. Co-construction builds expertise. Co-construction processes include the sharing of personal constructs and the building of new learning-teaching experiences, practices, theories and beliefs.

3. Co-construction may encourage a culture of learning in schools as processes inform future pedagogy, learning outcomes and school change.

This final generalization acknowledges the potential for co-constructing change beyond this project. As co-construction effects transitions in thought and practice for individual teachers, it also enhances teachers’ understandings of self. Through sharing and developing constructs and practices, “teachers will change schools by understanding themselves” (Diamond, 1991, p. 120). Teachers who engage in intentional and continuous interactive learning contribute to changes in pedagogy, learning outcomes and school policy.

From data patterns to generalizations

Personal experiences, theories, beliefs and training shaped participants’ language development planning in early childhood classrooms. Early in the research year, participants reflected on their personal theories and pedagogy in response to students at educational risk. To complete this study the teachers and I co-constructed content and processes for classroom language development practices. Together, we reflected on nuances, consistencies and inconsistencies within these experiences of co-construction. My task (open to all participants) was to understand essential features and influential factors in effective co-construction. Participants formed opinions and
theories about the potential of co-constructed language development practices in other educational contexts.

One outcome of understanding and experiencing co-construction was that participants predicted the extent of their future use of effective co-construction. They considered possible contexts of use beyond this study. For example, Penny, predicted her use of co-constructed listening and phonological awareness strategies in her next school with younger students (CBRD11/12/00). Participants’ understandings of what they could “take away” from their co-constructed experience provided evidence-informed links to the potential of co-construction in other primary classrooms. Wellington (2000) argues for the term “evidence-informed”, rather than “evidence-based” to highlight his belief that educational and medical research informs rather than determines policy practice (p. 169) in non-research contexts.

In this chapter, the text focus shifts. Rather than weaving teachers’ data with available theory to a structured narrative detailing nuances of co-construction in one school, I focus on the potential of co-construction for building teacher expertise and contributing to school change, in other primary schools. The processes for making generalizations are discussed by Stake (1995). As in this chapter, Stake (1995) moves from “looking for the detail of interaction within its contexts” (p. xi) to using data and interpretation to form generalizations or assertions. He recommends a focus to interpretation, organization and validation of “naturalistic generalization” (p. xiii) based on the selection of data “to maximize what we can learn” (p. 4). Here, I sought to understand the importance of apparent differences between co-constructive content, process and outcomes when working with early childhood teachers.

The template for co-construction serves as a benchmark for understanding when, why and how the co-construction processes require modification. Learning about co-construction was maximized as I interpreted and reported diverse particularities in the stories of Jacqui, Penny, Toni, Maree and (to a lesser extent) Coral. Such learning is unlikely to have resulted from my establishing of uniformity in the co-constructive experiences of all ten teacher participants.
Generalizations are validated by stories from the four teachers who most contributed to my learning: Jacqui, Penny, Toni and Maree. Within this action research, involving one school context but ten teacher participants, these four teachers emphasized the uniqueness of co-constructive experiences. Bassey (1999) and Wellington (2000) discuss the benefits of multiple participants in one context for qualitative educational research. Using Stake’s (1995) terminology for the current research, Penny and Jacqui provided “positive” examples of the development of co-construction. Penny accepted and actively contributed to an interactive and reciprocal learning experience. Jacqui was a learner-centered teacher who responded to co-constructive opportunities. Her story “added confidence” to the emerging pattern that co-constructed learning enhances teaching outcomes.

Interactions with Toni contributed to my understanding of ways to facilitate co-construction. I needed to “modify” the process of co-construction to accommodate Toni’s preference for information-based learning while developing opportunities for reciprocal learning interactions as characteristic of co-construction. Working with Toni initially challenged the developing generalization that “co-constructed learning enhances teaching outcomes.” The fourth teacher featured is Maree whose story contributes a “counter-example” of co-construction, highlighting the need for review and repair. The experience of co-constructing language development plans with Maree did not follow the pattern of positive outcomes from co-construction until much later in our relationship. The experience of working with Maree confirmed that co-construction could break down. More importantly, learning interactions with Maree taught ways to repair co-constructive processes.

If the stories of Toni or Maree had been excluded as atypical of co-constructed learning, opportunities to interpret participants’ learning would have been reduced. Instead, these stories of modification and counter-example enhanced my understanding of how alternative processes facilitated interactive learning. The need to review the co-constructive template after further analysis of Maree’s data, added to my understanding of essential features and influential factors in effective co-construction. The theme that “co-constructed learning enhances teaching outcomes” emerged from the co-construction of transitions in thought and pedagogy for all teacher participants. As the parameters of effective co-construction were identified,
developed, repaired or repeated I was able to generalize about the potential for effecting change via co-construction.

Participation in teacher stories facilitated my learning about co-construction. Stake (1995) refers to the benefits of experiential understanding for qualitative researchers. Wilhelm (2001) discusses the social construction of learning. Here, the shared experience, social learning processes and the development of co-construction with participant teachers, enhanced my interpretation of our strengths, needs and preferences. Our reciprocal learning about classroom language development planning ensured that the content and processes used were appropriate and acceptable to all. Co-construction is a way to validate understandings as they are developed, used or modified.

The three generalizations stated in the introduction to this chapter are developed from teacher and classroom data, as well as, teacher and researcher interpretations. They are defined and defended in view of current thinking on generalizations from qualitative research method. Stake’s (1995) argues that particularization rather than generalization is important since the analysis of difference implies knowledge and understanding of similarities amongst other data. Stake (1995) clarifies his belief that “valid modification of generalization” (p. 8) can be achieved through procedures such as triangulation (as used in this study).

Stake (1995) compares quantitative and qualitative procedures for drawing generalizations from data. He recognizes the place for comparative and correlational techniques for this purpose and emphasizes interpretation in qualitative research. Stake discusses the researcher’s task as thorough understanding of the context and issues in which s/he is immersed. Here, the systematic pursuit of understanding included the refinement of research questions, the consideration and filtering of issues, and the continuous validation of researcher interpretation with other participants.

My on-going task of interpretation and re-interpretation of cumulative data in action research spirals is described by Stake (1995) as “progressive focusing.” Stake took this term from Parlett and Hamilton (1976) to emphasize qualitative researchers’
need to continuously refine their thinking, note patterns in research data and seek greater understandings by examining, rather than discarding, discrepancies in patterns. In this study analysis of Term One data in Chapter 4, Terms Two and Three data in Chapter 5, and Term Four data in Chapter 6, demonstrates the continuous refinement of data interpretations towards the generalizations discussed here.

The practice of progressive focusing in this study is also evident when I reflect on changes in study focus through subsequent research cycles. Initially, attention was drawn to the OWLD as a way to guide language development practices used in early childhood classrooms. The interpretation of teachers’ need to enhance their understandings and repertoire of practices for students at educational risk prompted a change from the content of language development plans to processes for supporting language planning. In the second and third action research cycles participants’ input and responses to co-planning shaped and improved the processes of effective co-construction.

During Term Three, focus on the co-planning of classroom language development practice was sustained by repeated opportunities to learn more about both the content and processes of co-construction. My attempts to interpret factors contributing to positive outcomes for teachers, children, parents and school administrators progressively focused attention to the templates for co-construction. By Term Three of the school year, I had a working knowledge of the co-construction of language development plans with early childhood teachers. Participants began to report their application of co-constructed thinking and pedagogy beyond our classroom tasks for students at risk. In the fourth action research cycle, generalizations about co-construction were formed and validated in several ways.

The necessity to “maintain vigorous interpretation” (Stake, 1995, p. 9) was indicated by participants’ spontaneous generalization of research outcomes. In the latter stages of data collection generalizations were emerging as possible conclusions, assertions, fuzzy propositions or fuzzy generalizations (Bassey, 1999). Data interpretations and participant reflections supported “petite generalizations” and hinted at “grand generalizations” (Stake, 1995, p.7). At this time, Stake’s cautious summary of the research literature was important, “we do not have adequate guidelines for
transforming observations into assertions—yet people regularly do it” (p. 9). I was mindful that the completion of data collection and working interpretations did not guarantee adequate researcher understandings for generalization.

Late in Term Three, eight of the ten teachers supported the developing generalization that “co-constructed learning enhances teaching.” (I was still unsure about outcomes for Toni and pessimistic about outcomes with Maree.) Yet I did not have a strong basis for claim about how co-construction shaped teacher thought and pedagogy. The process of again refining research questions redirected my interpretations during Term Four. The qualitative emphasis on nuances, the importance of context and the individuality of each participant (Stake, 1995) directed me back to data and source. Progressive focusing was incomplete without persistent adherence to three points of qualitative inquiry:

(a) Revisit the data,

(b) verify interpretations, and

(a) understand exceptions to clarify patterns.

Revisiting data and teacher reflections increased my understanding about which influences within co-construction shaped teachers’ thoughts and pedagogy, and why. I revisited stories with Toni and Maree to clarify how and why their experiences of co-construction were different from those of Jacqui, Penny and other teachers who embraced co-construction.

Maree and I had not established a functional shared construct of early childhood language development. Instead we had worked from assumed understandings about one another and our intended outcomes for Semester Two. Toni and I had tried a number of ways of working together in the classroom until we developed a functional blend of information-centered and interactive teaching. It took time to find effective processes for our co-construction. Revisiting and reinterpreting data while asking how and why the experiences of co-construction with Toni and Maree differed from co-construction with the eight other teachers, enhanced my understanding of these atypical cases.
Returning to teacher data to verify interpretations was a way to interrogate prior observations and reflect on previous interpretations. Stake (1995) recommends investigating mismatches between research participants to promote understanding of research generalizations. In this study, revisiting mismatches between participants’ expectations, preferences and personal constructs (as in Chapter 6) helped to explain difficulties with co-construction. Verbal and written reviews of the co-constructed project by Toni and Maree redressed my researcher interpretations. After misinterpreting earlier experiences with Toni and Maree as mutually unsatisfactory, revisiting their interpretations with them in Term Four clarified their support for co-constructed language development practice. Despite our need to modify the content and processes of co-construction, Toni and Maree verified the potential of co-construction in their current contexts and those they predicted for the future. They added to the positive reviews of the co-constructive experience by all other teachers, supporting the generalization that “co-constructed learning enhances teaching.”

Although my experiential understanding developed with each of the ten participant teachers, it was the particularities of my interaction with each teacher that delineated effective and ineffective co-construction. Modification of the co-construction template, as an outcome of better understanding Maree’s data, reiterated that co-construction requires intentional, continuous effort and real versus assumed understanding of participants’ personal constructs and preferred learning processes. At the end of the project year, every participant acknowledged incremental growth in their thinking and classroom practice as an outcome of acceptable and effective co-construction processes. Participants interpreted the potential of co-constructed planning for their learning, classrooms and students. Each explained how co-constructed learning applied to their future teaching and learning.

The challenge of qualitative generalization

Processes to maximize learning through qualitative inquiry are also opportunities to reflect on the challenges and benefits of qualitative inquiry. Here, research design was intended to scaffold understandings about co-construction as a means of effecting change in teacher thought and pedagogy. Stake (1995) cautions that nuances within individuals’ data and issues arising can redirect qualitative
researchers away from key issues to report insignificant exceptions to trends. One challenge for qualitative researchers is to discern those exceptions and data irregularities that enhance rather than confuse learning.

In the current study, final generalizations were strengthened by action research opportunities to continuously interpret, select and build teacher stories about influential factors shaping the processes and outcomes of co-construction. The focus was not on collective experiences, but on our reciprocal learning from those experiences. Hence, transition from data to generalizations necessitated selecting and using research opportunities reliably. Progressive refocusing to select data, review research questions, develop the narrative, identify patterns, and explain assertions with typical and exceptional cases preceded the forming of defensible generalizations. Recognition of the multiple possibilities from qualitative data further clarified the need to select data, and analytical and interpretive processes, to maximize learning.

The possibility of poor researcher selection of focus issues from qualitative inquiry also impacts on the transformation of data to defensible generalizations. This is particularly likely when etic issues (brought in by the researcher) conflict with those emerging as emic issues (real for other participants). In this study, participants were encouraged to provide written and verbal feedback through each school term. This was a way of checking intended project emphases as interpreted by all participants. Similarly the matching of researcher and teacher reflections by revisiting data in Term Four was a way to verify or refocus participants’ interpretations as necessary.

Stake (1995) notes that the collection of data from individuals and analyses of context in qualitative research, “are infinitely complex” (p. 33). In the present study, final generalizations were progressively built from raw data, individual teacher stories, exploration of themes and issues when understanding individuals’ experiences, interpretation of patterns, verification of emerging patterns, further learning from exceptional data and participants’ interpretations of the potential for co-construction in other educational contexts. Generalizations developed with research participants attended to how co-construction related to their personal contexts. Term Four interpretations focused on how participants generalized their co-
constructed experiences beyond the project boundaries of year 2000 early childhood classes.

During the project, the co-construction template developed as a scaffold for interactive processes. Participants’ personal beliefs, theories, previous practices and experiences were recognized as part of this scaffold, the basis from which further content could be negotiated. Most importantly, new understandings of each teacher’s personal constructs and connections to pedagogy functioned like additions to the basic scaffold. With this framework, learning and teaching were enhanced and general outcomes identified. Understandings about how co-construction effects transitions in teacher thinking and pedagogy, define the contribution of this study.

Co-construction is most effective when it begins with respect for participants’ current constructs and pedagogy and is built in familiar, meaningful contexts. Here, study participants contributed to the planned development and refinement of classroom language development practices. They did not agree, a priori, to particular changes in teacher thinking and practice, or that co-construction would provide the means to change. Teachers’ research commitment was to planning language development practices for early childhood classrooms rather than to the implications of co-construction for future classroom planning. Prior to this study participants could not know which processes would evolve during the school year. The study became a qualitative inquiry of influences within the co-constructive process. As Wellington (2000) points out, research such as this, “cannot determine what ought to be” for all teachers in all schools but it does show “what can be achieved” (p. 177).

Study participants accepted opportunities to contribute to, and use, co-constructed classroom practices. All participants chose how to define their personal constructs, select classroom practices and contribute to this study. At the completion of data collection participants remained free to choose personal constructs and classroom practices for future use. All chose to generalize project learning in some way. Their generalization of thought and practice manifested as the confident application of new-found expertise beyond project activities.
The “thick description” and “multiple realities” (Stake, 2000, p. 43) included in earlier chapters, contribute to generalizations about co-construction because researcher generalizations concur with teacher generalizations. Opportunities to participate in the classrooms being studied and intentional interaction with ten teachers added insight into co-construction from the researcher-as-learner point of view. The inclusion of teacher-researcher interactions, teacher reflections shared with the researcher incidentally, teacher reflections from the Staff Review Workshop (SR4/9/00), Staff Evaluations (E21/11/00) and my independent interpretations, show respect for truth and respect for persons, as recommended by Bassey (1999).

Bassey’s (1999) concept of truthfulness is used in this study “as an alternative to reliability and validity” for qualitative educational research (p. 74). This concept addresses the inaccuracy of assuming cause and effect relations in such research. In accord with Bassey’s (1999) discussion, establishing internal validity for this study would confirm co-construction as the cause of change in teacher thinking and practice. External validity would confirm that co-construction can be generalized to other contexts. The necessity to establish internal or external validity is replaced by the need to establish trustworthiness throughout the research process. Co-construction is examined as a process that can effect change in teacher thinking and pedagogy, rather than a process that ought to be used in each context of intended change (Wellington, 2000). Generalizations from this study indicate the potential of co-construction in primary classrooms. Furthermore, generalizations encourage the use of co-construction processes in other educational contexts to determine the extent to which co-constructed learning might enhance teaching there.

The teacher stories analysed in this study, clarified by teacher participants and myself, showed how changes in teacher thinking and pedagogy were tracked over one school year. Hence the first generalization, “Co-construction effects transitions in teacher thinking and pedagogy.” Teacher stories also included examples of teachers sharing thoughts and classroom practices and applying their co-constructions to other students, peers and classrooms. The second generalization, “Co-construction builds expertise” acknowledges the value of interactive learning for adult participants. The third generalization, “Co-construction may encourage a culture of learning in schools” is borne out by teacher reflections, improved learning
outcomes for students, and links to teachers’ planning for the next teaching year. (This study reports teacher outcomes as the phenomenon of interest. Original data support claims about enhanced student learning outcomes, detailed in the OWLD1-4, teacher and researcher records. See Appendixes G-J.)

This study argues the potential of co-construction in alternative educational contexts, but gives no guarantee of comparable outcomes. An understanding of factors influencing effective co-construction allows others to hypothesize about the potential for co-construction, in their educational contexts. Advocates of co-construction can use this study to recommend transition to interactive learning (about personal constructs and current pedagogy) and the use of teacher voice to scaffold further learning.

However, Mann (2002) cautions qualitative researchers to consider the dissemination of research findings in appropriate ways to sceptical and supportive audiences. She identifies several factors that can jeopardize audience interpretations and acceptance of qualitative generalizations. One factor is the necessary length of the text that is required to adequately draw findings “from a net of interconnecting factors, some of which are very subtle and only surface in what some people see as textual ramble” (p. 73). Mann discusses the various ways in which qualitative generalizations can be disseminated to “allow the immediacy of the data” to counter claims that qualitative research is “irrelevant to the wider community because its studies are small-scale and non-generalizable” (p. 77). Mann (2002) follows the recommendation of Siedman (1991, p. 14) that the value of qualitative generalizations are more likely to be recognized if the researcher also provides, “compelling enough detail and in sufficient depth that those who read the study can connect to that experience, learn how it is constituted, and deepen their understanding of the issues it reflects” (p. 71).

As I discuss each generalization developed from the teacher data, analyses and interpretations in this action research, I expect that readers will recognize the importance of anecdotes from early childhood classrooms. Some readers will identify similarities between their experiences, “regardless of differences in context and personnel” (Mann, 2002, p. 77) and those of teacher participants. If so, these readers will connect to, and critique the research generalizations with their own worldview.
Co-construction effects transitions in teacher thinking and pedagogy

This first generalization extends the application of co-construction from early childhood teachers and students at educational risk, to primary teachers and whole classes of students. This application of the co-constructive process became evident within this study. Although initially intended to support language planning for teachers of students at educational risk in early childhood classrooms, teachers requested, input to, and accepted co-constructed language development plans for other children and whole classes (CBRD26/6/00).

Teachers noted when plans co-constructed for students at risk applied to those without identified risk. For example, Penny and Suze, (both Year One teachers) saw that co-constructed planning could be refocused from individual students and small group planning to whole class planning (CBRD22/6/00; CBRD26/6/00). In this way, teachers applied the process of sharing theory and practice about teaching and learning to classroom contexts, as well as, to individual students’ needs. They regarded co-construction as a process of intentional and continuous building of their own expertise. They recognized transitions in their thinking and practice about language teaching and language learning. Penny and Suze demonstrated how teachers’ increments in expertise were not limited to planning for students at educational risk.

Co-construction builds expertise

The second generalization concerns outcomes of co-constructive language planning. The intended outcome of this study was to facilitate transitions in teachers’ thinking and practice for students at educational risk. Actual outcomes included transitions in teacher and researcher thinking about whole class language planning, intent to use co-constructed language practices beyond the project boundaries, and awareness of ways to influence professional development via co-construction processes.

Expertise was co-constructed via interactive learning and the experiential understanding of effective planning method. Interactive learning occurred when the teachers and I shared our personal philosophies and practical expertise. We learnt
that mismatches between personal constructs of early childhood language development and contrastive expectations of learning style impeded the progression of co-constructive language planning. The consequence of such learning was that we found ways to repair and modify the process of co-construction to facilitate increments in thinking and pedagogy. All participants reported increments in expertise, albeit unique to their personal constructs and classroom contexts.

This generalization was shaped from co-constructive language planning with ten teachers. This number was sufficient to recognize a broad acceptance of co-constructive planning as a way to build expertise. However the significant modifications to the content and processes of co-construction with two of the ten teachers added justification to the generalization, “co-construction builds expertise”. This claim was more fully understood through experiences that initially challenged this pattern. Only after the stories of Toni and Maree had been reinterpreted with these teachers could this generalization be justified.

The pattern of reciprocal or interactive learning emerged from the co-construction of language plans by two or more participants for each early childhood classroom. The recognition of each participant’s expertise was fundamental to the building of shared expertise. Teachers considered specialist language expertise as necessary to identify and plan for students at risk within their familiar and unique classroom contexts. Teachers welcomed opportunities to develop their own expertise if professional support was given in ways acceptable and appropriate to each of them. The strengths and needs of individual participants were considered as part of each unique classroom co-construction. Therefore, the sharing of theory and classroom practice enabled new expertise to be selected and built in ways that were appropriate and acceptable to all classroom users. Participants agreed that sharing theory and useful practice, as well as, interacting with teaching peers, contributed to the building of expertise.

**Co-construction may encourage a culture of learning**

The third generalization promotes teachers’ experiential understanding of learning as a way to inform their teaching. Experiential learning emphasizes the benefits of
being immersed in particular learning contexts as compared to learning that is information-based or decontextualized. Wilhelm’s (2001) model of Vygotskian learning points to the importance of socially constructed learning and metacognitive processes. Both are used in co-construction. They show how the experience of being a learner encourages teachers to reflect on the teaching and learning experiences they provide for others. Co-construction uses accepted learning principles from teacher-student interaction to facilitate a culture of learning amongst adults.

Current educational theory promotes strategies to develop autonomy, belongingness and competence in child learners (Raison, 2001). Using a literacy learning example, teachers are encouraged to create opportunities for students to be engaged in success since “engaged readers are motivated to make choices about what they read, how they read and what they take from reading” (Raison, 2002, p.1). If this thinking is extrapolated from learning-to-read contexts to learning-to-teach-reading, a generalization can be tried out. “Research indicates that intrinsic motivation is essential to… engagement and engagement in learning… involves having a clear purpose, taking responsibility for learning and seeing oneself as a potential (learner)” (ibid). Co-construction processes encourage teachers to make choices about what they teach, how they teach and what they take from one teaching experience to another. Working co-constructively allows teachers to engage in the exchange and building of expertise as they co-construct theory and practice for their personal teaching contexts. This connection to working contexts is intrinsically motivating. Participants define their purpose, take responsibility for their role in interactive learning and are confirmed by other participants’ belief in their potential to learn.

Co-constructive thinking is a powerful interpretation of educational theory. Teachers’ interaction with students to facilitate engagement in purposeful learning is established educational practice. The focus here is the translation of principles of learning and teaching from teacher-student interactions to consolidate theory and practices for teachers as learners. For example, Raison (2001) recommends the joint construction of co-operative reading activities with disengaged students in the middle primary years as a way to enhance their thinking and reading practices. Current literature focuses on the co-construction of thought and practice by teachers and students (Wilhelm, Daube & Baker, 2001). The present study focuses on the co-
construction of thought and pedagogy by teacher-researcher pairs. Teachers who subsequently co-constructed classroom theory and practice with their peers show increased engagement in their professional practice via their school community of learners.

Another example of how co-constructed learning enhances teaching comes from Nichols and Read (2002). These authors call for teachers to understand the “negotiation of knowledge” (p. 49) when communicating to parents about students at educational risk. They discuss cases in which teachers are challenged to “negotiate meanings between participants” using continuous acts of “representation and interpretation” (p. 52). As in the current study, Nichols and Read acknowledge how an improved understanding of influential factors, informs the co-construction of changes. The Nichols and Read study demonstrates “the importance of participants’ active knowledge construction and negotiation” (p. 50) to improve home-school communication, as part of teaching. In the current study, co-construction is developed as a habitual way to negotiate and build knowledge about teaching and learning. Co-constructed learning applies to researchers, teachers, students, parents and any combination of these learners.

Diamond (1991) also describes how learning equips teachers to teach. As in this study, his work is grounded in personal construct psychology and talks about teachers’ learning in terms of transformations. Diamond asserts, “Learning is what makes a teacher a person” since learning is “not just discovery and invention but also negotiation and sharing” (p. 14). In this study, teachers showed how co-constructed learning was extended to other students, to whole class planning, to discourse with teaching peers and to debates about educational policy and practice. (Examples are discussed in Chapters 4 through 6. One example, from Chapter 5, refers to how Jacqui initiated discussion about the impact of outcomes focused thinking on year placement for students with her peers, myself and the School Principal.)

Diamond’s (1991) belief that learning by transaction and transformation enhances teachers’ levels of development is akin to the third generalization here. “Co-construction may encourage a culture of learning in schools as processes inform future pedagogy, learning outcomes and school change.” During the school year,
some participant teachers (such as Jacqui and Penny) were engaged in changing the
culture of learning in their school. They showed what can happen in classrooms,
homes and schools when knowledge is co-constructed.

Why co-construction?

The question, ‘Why Co-construction?’ rhetorically interrogates possible benefits of
co-construction in contrast to consultancy or collaboration as processes for effecting
change in teacher thought and pedagogy. This is an important question because
consultancy and collaborative methods of supporting teacher change are encouraged
in Western Australian Primary schools. Here, co-constructed learning is presented as
an innovative alternative for supporting teachers through incremental change in
thought and pedagogy. I argue that co-construction reflects contemporary principles
of teaching, learning and assessment as documented in the *Curriculum Framework*
(Curriculum Council, 1998) and the *Plan for Government Schools 2004-2007*
(Department of Education and Training, 2003).

This personal preference for co-construction over consultancy or collaboration is a
philosophical one. Consultancy method regards teachers as learners or recipients of
new knowledge or abilities, recommended by more expert others. Theoretically,
collaborative method values teachers as reciprocal learners. However, shared
ownership in collaboration is threatened when the collaborator assumes a visiting or
resident expert role. Collaboration encourages information exchange related to
adjacent topics. Constructs on the same topic are not necessarily shared and built. In
contrast co-construction relies on all participants as contributors to new knowledge.
Teachers’ expertise confirms their strengths and needs, the particularities of their
classrooms and the opportunity for visiting or school specialist teachers to be
involved in their classrooms.

In the Language Development Project both theoretical and practical exchanges were
important components of co-construction. Parameters of co-construction were
intentionally and continuously developed with participant teachers. Prior beliefs,
experiences and practices influenced the negotiation of new classroom practices as
participants’ voice linked previous thought and pedagogy to co-constructed plans.
Every participant clearly influenced the particularities of co-constructed language development practices. Theory and practice were accepted and used when judged to be acceptable and appropriate for particular classroom contexts. When theory or practices were proposed but regarded as inappropriate by co-constructive partners, they were re-negotiated. Such intentional and continuous co-construction is recommended for classrooms in the future.

Templates for co-construction (given in Chapter 5) suggest how to begin this reciprocal learning. The general template for co-construction and one specific to language development plans for students at educational risk, provide recommendations for the intentional and continuous interaction that defines co-construction. In Chapter 6, re-interpretation of teacher stories and teacher reflections showed how, when and why the templates could be adjusted. Adjustments to process or content matched the needs of individual participants (teachers or the researcher).

Retrospectively, the co-construction templates provide a guide rather than a procedures manual of essential steps in defined order. The necessity for participants to choose and review both content and process for co-construction strengthens the system. The malleability of the co-construction process is one of its strengths. Co-construction processes eventually accommodated the needs of ten teachers, all with positive learning-teaching outcomes.

The advantages of co-construction are summarized in generalizations developed from this study as discussed above:

(a) Co-construction effects transitions in teacher thinking and pedagogy,

(b) co-construction builds expertise, and

(c) co-construction may encourage a culture of learning in schools.

The hypothetical contrast of co-construction with alternative teacher support models further justifies co-construction as a way to effect change in teacher thinking and pedagogy. Alternative ways to support teacher change are considered against the minimal requirements for effective co-construction in primary classrooms. This exercise recognizes the reality that minimal conditions are not available in every primary classroom.
Recommended minimal conditions for effective co-construction are summarized as:

(a) The building of working relationships between voluntary participants,
(b) sharing of personal constructs,
(c) planning and implementation of practical tasks,
(d) recognition of “the central importance of context” (Flyvberg, 2001) to teachers’ decision-making,
(e) regular opportunities to plan, act, observe and reflect (Wadsworth, 1997) on co-constructed teaching, and
(f) respect for participants as interactive learners and teachers with unique expertise.

Understanding minimal conditions for co-constructing change illustrates the advantages of co-constructed language planning over alternative language development practices. Reflection on generalizations about co-construction in other educational contexts highlighted elements common to co-construction and other ways of building teacher expertise. The theoretical relationship between consultancy, collaboration and co-construction as ways of supporting change in teacher thought and practice, is represented graphically in Figure 1.

Figure 1

Representation of the relationship between consultancy, collaboration and co-construction
Another comparison can be made between co-construction and shared teaching arrangements. Practices such as team-teaching (or co-teaching) and tandem-teaching, are opportunities for sharing thought and pedagogy. Team-teaching implies that teachers plan and teach particular lessons together, usually combining their classes to do so. Tandem-teaching implies that two teachers share the teaching of one class, usually in a job-share arrangement. In the latter case, teachers may plan but not teach together. Both team-teaching and tandem-teaching enable peers to assist one another. They can also provide for the sharing of specialist expertise within teaching pairs. Team-teaching and tandem-teaching rely on interactions between participants. The outcomes of such teaching arrangements are linked to the quality of the functional relationship between staff members, as well as, to opportunities to plan, act, observe or reflect on learning and teaching.

Although possible, the action research sequence is not essential to the establishment of peer teaching arrangements. Similarly the sharing of personal constructs, co-planning, the implementation of practical tasks and respect for participants as interactive learners and teachers with unique expertise, is possible but not typical in team-teaching or tandem-teaching. By contrast, action research cycles are built into co-constructed planning.

The next comparison considers whether teachers’ participation in research projects can be comparable to co-constructed planning. Teachers are encouraged to research independently, or in collaboration with visiting researchers, as a way to enhance pedagogy (Altrichter, 1993; Kincheloe, 1991; Schratz, 1993). Tripp (1987) examined the “possibility and value of a more symbiotic relationship between classroom teachers and teacher educators through a form of collaborative research” (p. 179). He attended to issues such as teacher participation in research questions, control of the research project and opportunities for teachers to choose aspects of research from their current practice and classroom contexts. Tripp concluded that teacher-researcher relations could improve if future collaborative relations included teacher reflections on their own practice and improved researcher understanding of “the culture, site and person-specific nature of classrooms in particular and schooling in general” (p. 190). Conditions recommended for co-constructed learning were not common in the teacher-researcher dyads examined by Tripp in the 1980s.
Tripp (1993) focused on shared commitment, topics of mutual concern, shared control, outcomes of equal value and fairness amongst teacher and researcher partners. He discusses co-operative and collaborative phases in teacher-researcher partnerships. Tripp uses examples of particular decisions to be made and the issue of responsibility for research outcomes to suggest that teachers and researchers have “equally important but different roles to play” in classroom-based research (p. 150).

Tripp’s (1993) critical incident approach to research in education requires teachers to document and analyse real incidents of dysfunction or unintended outcomes of teaching, in order to understand contributing and influential factors and reduce the chance of reoccurrence of the problem. His commitment to making research “deeply contextualised in the culture of classrooms and the actions and values of teachers” so that outcomes are “immediate and real for teachers” (p. 152) was also a principle in this research. Like Tripp, I sought to explain teaching from teachers’ points of view. In doing so, Tripp’s work was encouraging and influential. Since the critical incident process is grounded in the “ordinary moments” of teaching and learning (Shafer, 2002), it has much in common with co-construction as a process of involving teachers in educational research. There are also subtle differences.

Unlike Tripp’s teacher-researcher agreement, this project did not offer teachers equally shared control over the research process or insist that teachers shared my view of the necessity for this project. Teachers had at least equal input to the content and process of co-construction since I was interested in the ways that they would shape classroom language planning. Research variables such as the duration of the project, the amount of time the researcher was available, the selection of action research methodology and qualitative analyses, were not negotiated with teachers. Throughout the project, teachers retained a choice about their voluntary participation. Teachers’ could control their participation, as well as, influencing the content and processes of co-construction. These options were intended to empower teachers to become active research participants rather than research subjects.

Once they had become involved, all of the teachers’ participated for remainder of this research project. Teachers’ commitment was interpreted as a link to their expectation of practical classroom support with language development planning for
students at educational risk, for the duration of this project. I interpreted teachers’ continued participation in the Language Development Project as an active judgement that the research was appropriate and acceptable to them. Their perspective was valued from the outset. On the contrary, any obligation for teachers to be involved in qualitative research design or administration is likely to have discouraged their participation.

Constant communication of research design and administration processes created an opportunity for teachers to become involved in these aspects if they chose to do so. Tripp (1993) recommends teachers’ equal control and shared commitment to the necessity of the research. However, in this current case, teachers’ active participation was secured largely without necessity for them to be involved in “research” aspects of the project. Teachers’ commitment emphasized the exchange and building of pedagogy directly relevant to their classroom priorities. They accepted opportunities this project offered, because they perceived connections to personal constructs and their classroom contexts.

Sentiments interpreted from the teachers in this study address their concerns about conflicts between educational research and teachers’ practical priorities. Research involvement at this and other schools (Bochenek, 1989) suggests that many teachers regard research as theory without practical application. As expected, teachers are inclined to become involved in research if they perceive their practical needs will be met, but not if they anticipate that additional expectations and responsibilities will be imposed upon them. Social judgement theory explains this possibility in terms of participants’ ego-involvement or “how important the issue is” to their self-identity (http://www.qas.wvu.edu/~sbb/comm221/chapters/judge.htm). In practical terms if research is regarded within one’s latitude of acceptance or non-commitment, opportunity exists to persuade teachers to become involved. Conversely, if teachers reject research as unacceptable in their work context, there is little chance of securing their involvement (ibid).

Tripp (1993) recommends that teachers are collaborative partners in research and that the critical incident approach can encourage teacher-researcher partnerships. Eisner and Peshkin (1990), Le Compte, Millroy and Preissle (1992), Kincheloe (1991),
Schratz (1993), Wellington (2000) and others address numerous specific issues relating to teachers’ participation in qualitative inquiry in education. This study adds co-construction as an opportunity for teachers to participate in classroom-based research and to make professional judgements about the benefits (or otherwise) of the content and processes of research participation.

Since co-construction is designed to match teachers’ acknowledged needs for classroom support with appropriate thinking and pedagogy, teachers regard the co-construction process as a helpful adjunct to their classroom responsibility. Given that effective co-construction relies on input by both (or all) participants, classroom teachers can influence the research content and process to maximize their learning. Furthermore, the co-constructive classroom researcher can facilitate teachers’ awareness of their research role. As discussed in earlier chapters, co-construction can make tacit learning explicit. The implication is that teachers are empowered to consider future co-construction as a useful and accessible form of classroom-based action research.

Unlike other practices of qualitative inquiry by educational researchers, co-construction provides the opportunity to build working relationships between voluntary participants (minimum condition 1) prior to the specification of research potential. As personal constructs are shared in the early stages of co-construction (minimum condition 2), research interests can be linked to teachers’ ideas “that they already believe” (http://oak.cats.ohiou.edu/~dt225196/sj.htm). Teachers and researchers then co-construct thoughts and practice (minimum condition 3) within teachers’ real decision-making contexts (minimal condition 4). They select regular opportunities to plan, act, observe and reflect (minimum condition 5) with respect for one another as interactive learners and teachers with unique expertise (minimum condition 6).

Co-construction is not specific to research. It is a way of integrating personal construct theory and social judgement theory, mindful of minimal conditions for interactive learning. Teachers can participate in classroom-based research to co-construct changes in thought and pedagogy, motivated by the opportunity for improved learning and teaching outcomes. This connection between research and
practice fits the “latitude of acceptance” (Orban, 1999; Runner, 1999; Curtis, 1999; http://www.as.wvu.edu/~sbb/comm221/chapters/judge.htm) held by many classroom practitioners. Co-construction is recommended as an acceptable and appropriate way to encourage classroom-based educational research because the researcher’s knowledge of method accompanies the teacher’s knowledge of their classroom. Each partner is advantaged by access to the other’s specific expertise. In many cases neither the teacher nor researcher could achieve alone, that which they could co-construct.

**Expertise**

The question of expertise is critical to a balanced review of co-construction, particularly when compared to consultancy and collaborative approaches to change in teacher thinking and practice. I have discussed how a Vygotskian perspective provides a theoretical basis for reciprocal, interactive learning as in co-construction. This study emphasizes respect for all participants as interactive teachers and learners with unique expertise (minimum condition 5). Within this framework there are occasions when particular expertise is required and advantageous. The assessment of students’ language learning status and the impact of language disability or disorder on educational attainment is one such example.

Teachers in this study and beyond it, frequently identify the need to understand precisely how students’ unique language learning profiles manifest as literacy and general learning problems. Recently, (RD3/4/03) a teaching colleague discussed her need to understand why one seven year old student reads at a reduced level for her age and why she does not, or cannot, read her own written work. This teacher was also concerned about the student’s lack of independence with classroom literacy tasks. This is one example of how classroom teachers recognize their need for specialist assessment of some, but not all students at educational risk.

Wilhelm, Baker and Dube (2001) remind us, “all knowledge is socially and culturally constructed” and “what and how the student learns depends on the opportunities” provided (p. 2). This also applies to classroom teachers as learners. Since most schools do not have staff with specialist language expertise, teachers’
understandings of students with language-based educational risk and associated classroom practice is constructed in a variety of ways. Many school staffs rely on visiting speech pathologists, educational psychologists or teachers undertaking specialist duties in language support roles, to assist teachers’ development of language expertise. Throughout this study, teachers, teacher assistants, parents, school administrators and students had opportunities to access specialist language expertise. All teachers identified access to specialist language expertise as a positive feature of their research participation. They recognized the benefits of specialist training and experience and acknowledged opportunities to develop language expertise as part of this study.

Wilhelm et al. (2001) highlight the importance of quality opportunities for learning within a co-constructivist model. They use the terms coconstructivism and socioculturalism to explain that learning occurs through the “transformation of participation.” These authors consider that “learning is not ‘natural’ but depends on interactions with more expert others” (p. 2). They clarify their view that “more capable others” are responsible if the student does not progress. It follows that language specialists are responsible for change (or lack of change) in teachers’ understanding or pedagogy, specific to language-based educational risk. In this study, the researcher would be responsible for the extent of change in teacher thinking and pedagogy as an outcome of co-constructed language development.

My view is similar, but not identical to that held by Wilhelm et al. (2001). The amendment is that co-constructive language specialists can assume responsibility for the quality of language specialist input and language-learning opportunities offered to teacher participants. They can also be held responsible for applying personal construct theory and social judgement thinking so that teachers’ opportunities for learning are maximized. However, co-construction in this study respects voluntary participation, the building of working relationships, sharing of personal constructs, planning and implementation of language development theory in classrooms, co-construction of pedagogy within action research, recognition of reciprocal learning, and participants’ unique expertise. Wilhelm’s (2001) model of coconstructivism assigns responsibility for learning to the more capable participant. The alternative proposed in this study is that participants share responsibility for learning outcomes.
because they both contribute personal theory, classroom practice and specific expertise to the planned learning.

Other than this interpretation of responsibility for learning outcomes, the Wilhelm et al. (2001) coconstructivist model is applicable to adult co-learners, as well as, to teacher-child interactions. The recommendation that more capable others observe the learner, problem-solve his/her difficulty, match instruction to the learner, make informed decisions and support the learner to a point of readiness for enhanced understandings, can describe teacher-child interactions, teacher-researcher and teacher-teacher learning. The intent to use socially constructed learning to facilitate change from individuals’ zones of actual development, through co-constructed zones of proximal development, to new zones of actual development; is common to both examples. In the current study, the template for co-construction and the minimal conditions for effective co-construction guide researchers and language specialists to facilitate change for teachers as learners. Theoretically, the same templates guide teachers to facilitate changes in the thinking and practices of language specialists moving from clinical to classroom contexts, or researchers moving into classroom contexts.

Wilhelm et al. (2001) is the only place I have found the term coconstructivism used to refer to processes of reciprocal learning-centered processes. Elsewhere “social constructivism” is the term used to refer to the benefits of social interaction to enhance learning. Both terms can be applied to teacher-pupil and adult-adult learning, as in this study. To the best of my knowledge the proposed templates for co-construction, to facilitate transitions in teacher thought and pedagogy, are unique to the current study.

**Consultancy, collaboration or co-construction?**

Teachers recognize a need for pedagogy outside their zone of actual development. They use collaborative and co-operative learning strategies within their classrooms and for peer interactions. In recent years literature on collaborative partnerships in schools has supported a move from consultancy service models (Bashir et al., 1998; DiMeo et al., 1998; Harris, 2002). Recent schools change literature is also bringing

Within school systems, “consultancy” language development services recognize the expertise of visiting specialists and the comparative need for teachers to access or develop this expertise in order to plan classroom language development tasks for students at educational risk. Each of the minimal conditions for effecting change in teacher thinking and practice could be included in consultancy style language development services. However, none of these are pre-requisites to the establishment of consultancy services. Typically consultancy services are proposed as a time saving strategy for language specialists prioritising large numbers of clients. One consequence is that language consultants do not have the time to develop minimal conditions for interactive learning.

Typically, consultants give information about students at risk to classroom teachers and/or make recommendations for classroom practice. They do not build shared understandings or create experiences for shared observation, monitoring, assessment and explicit teaching. Consultancy support is characterized by information being selected and given, or requested and supplied. Language consultancy to teachers is designed and provided by the consultant without attention to teachers as interactive learners with their own unique expertise.

Currently speech pathologists, visiting teachers and speech-language co-ordinators provide a range of speech-language consultancy services to teachers. Consulting staff and teachers are often employed by different agencies whose policies and procedures may not be compatible. For example, guidelines for speech pathology services in schools were documented by Speech Pathology Australia (1996) to be revised in 2004. Oliver et al. (1999), for the Department of Education Western Australia, summarized issues related to the provision of speech-language development services to West Australian schools. Yet, the age of children eligible for services remains an issue. Primary schools in Western Australia enrol children from three to thirteen
years of age. Local Speech Pathology services limit eligibility to consultancy services to children up to school Year 2, or seven years of age (ibid).

Similarly, clinical models of specialist language development are designed and implemented with little or no input from the teachers of children being managed. Clinical speech-language services are typically offered to individuals and small groups of children and their parents. As for consultancy services, contacts between clinicians and teachers have the potential to include recommended minimal features of co-construction. In reality, clinical services are physically and philosophically separate from classroom-based language development. They do not include opportunities for teachers and clinicians to develop shared experiential understandings. Learning is not interactive.

As previously represented in Figure 1, effective collaboration and effective co-construction have much in common. Recommendations about the potential for co-construction are based on the positive outcomes of this project. All teachers had input to changes in their thinking and classroom language development practices. All teachers interacted from a position of expertise about their own beliefs, constructs, experiences and pedagogy. All teachers embraced the opportunity to use, engage with, consider and develop language expertise. All teachers had input to my learning, as well as, theirs. Possibly, but less likely, these outcomes would have arisen from an acceptance of collaborative partnerships. The term co-construction intentionally focuses participants’ attention to the on-going process of working together to translate shared theory to effective practice.

An important difference between co-construction and collaboration is that the former is intended to move from combined expertise to new zones of actual development. In contrast, collaborative processes emphasize the putting together of expertise rather than the building of new and extended expertise. While it is possible that collaboration stimulates the formation of new expertise, realities are more “co-operative than collaborative” (Tripp, 1993, p. 149). Another way of comparing and contrasting these two processes of professional partnership is to focus on expected changes. Co-construction involves negotiation of change. The required intentional and progressive negotiation ensures that planned changes in thinking and practice are
specified. Furthermore, co-construction requires that minimal conditions for effecting change be pursued. Collaboration does not necessarily involve increments of change. Professional collaboration, as in tandem-teaching arrangements, can encourage the continuation, increase or decrease of current practices. New thought and practices are possible but not always the intended outcome.

Collaboration is recommended when the minimal conditions for co-construction cannot be met. For example, when time constraints or physical separation enables the sharing of thought and planning by teachers, but not the shared implementation of classroom strategies. In such cases collaboration can function as a precursor to later co-construction. In this study the processes and outcomes of collaboration served as forerunners to the development of co-constructive language development planning.

Co-construction developed and was modified with teachers when attempts to plan collaboratively exposed weaknesses in those processes. Co-construction encourages the interaction of thought and experience. Attention is given to both the content and processes of interactive language planning. Unlike collaboration, the minimal features of co-construction and templates for the process, guide the development, refinement and review of learning for all participants. Unless specified, professional collaboration can be limited to shared thought or practice; co-construction gives focus to both. Furthermore, co-construction involves the intentional seeking out and sharing of respective expertise. Recognition of individual expertise is not left to chance.

Co-construction is recommended as a process for effecting change in the dynamics of professional partnerships. Co-constructed learning accommodates exchanges of thought and practice by classroom teachers and language specialists. All participants can expect to be both teachers and learners in continuous co-construction. They can expect their unique expertise to be respected and used. This possibility contrasts with consultation or collaboration-based specialist language development services that cannot be assumed to feature interactive learning or the creation of new expertise. When expert service provision is acted out as the giving of information (because of assumed needs) or information provision in response to learner requests, reciprocal
expertise is not necessarily recognized or shared. By contrast, co-construction includes the *expectation* (rather than the possibility) of reciprocal learning.

Co-construction as presented in this study or as promoted by Wilhelm et al. (2001) is not currently applied in Western Australian primary schools. Teachers taking responsibility for building their specialist language expertise may access language specialists using clinical, consultancy or collaborative service delivery models. Clinical information, consultancy input and collaborative planning do not meet all the minimal conditions for effecting change as recommended for co-constructed learning. This discussion of comparisons and contrasts indicates the ways in which specialist clinical, consultancy and collaborative language support services fall short of effective co-construction of thought and pedagogy.

As in Figure 1, my current personal construct of the relative importance of co-construction, as an approach to teacher support, can be described hierarchically. Consultancy can be enhanced by collaborative practices and collaboration by co-construction. Although opportunity for effective co-construction is somewhat determined by particular educational contexts, my preference is to seek reciprocal learning interactions with peers whenever possible. Co-constructive experiences have shown how each language planning interaction is an opportunity for learning about peers, with peers, about co-construction and about co-teaching.

As a consequence of this study, I actively pursue the minimal conditions for co-constructive problem solving when working with classroom teachers. Without an understanding of the child’s classroom tasks, the nature of the teaching and learning opportunities presented, and the skills, beliefs, experiences and practices of the classroom teacher; language specialists can comment on language features and implications for learning, but not on specific recommendations for children, teachers, parents or specialists in a given classroom context. This discussion justifies co-construction as more than a collaborative putting together of ideas. It is a practical representation of co-constructed expertise being more than the sum of individuals’ expertise.
When co-constructed, classroom practices consider the constructs, practices, experiences and beliefs of classroom teachers and language specialists, student data and classroom contexts. In addition, co-constructed classroom practice includes the interpretation of influential factors in language development planning and the building of explicit pedagogy by participants in contexts they know and understand. Unlike consultancy and collaborative language planning, co-constructive partners acknowledge and use both the classroom teacher’s expertise and that of the language specialist.

**Co-construction beyond this study**

Co-construction processes have potential to effect change in a variety of educational contexts. The first generalization, *co-construction effects transitions in teachers’ thinking and pedagogy*, can be re-examined in future contexts of need. In the current study, transitions in theory and practice were specific to classroom language development and early childhood education. Teachers’ expertise was constructed from their extensive prior experiences and a range of theories, beliefs and practices about early childhood language development. Although I intended to represent co-constructive partnerships between classroom teachers and language specialists in West Australian schools, I acknowledge the possible diversity of influential factors within and between primary schools. The teacher-researcher partnerships explored in this study will not be identical to teacher and researcher profiles at other schools. Hypothetically, other language specialists can input current language learning theory and pedagogy while expecting and respecting a range of personal constructs and practices amongst teaching colleagues.

The second generalization, *co-construction builds expertise*, focuses on the contribution of each participant when building new expertise. Participants are required to “create meaning and solve problems in a real context” (Wilhelm, Baker & Dube, 2001, p. 7). Having discussed consultancy as information without practice, and collaboration as the putting together, rather than the intentional and continuous building of expertise; co-construction needs to be demonstrated as the creation of new thought and practice with (rather than for) peers or expert others.
During this study, critical friends assumed similarities between co-construction and alternative ways of facilitating change in teacher thought and practice. This misrepresentation of co-construction as “a new word for collaboration” can blur the boundaries between consultancy, collaboration and co-construction unless subtle but influential differences are demonstrated. One example arose from presentation of this work in progress to a group of thirty teachers and speech pathologists working in schools (Bochenek, 2003). Opening questions and comments indicated that participants perceived co-construction (as I did during the evolution of the process) as a synonym for, or sub-type of collaboration. A different interpretation, in accord with Figure 1, was provided in question form, “Can one be a consultant who collaborates with teachers via the process of co-construction?” (B. Bennett, personal communication, October 11, 2004). These comments and questions provoke further thinking about co-construction beyond this study. At this stage, for the reasons debated in this chapter, I reiterate that co-construction has developed from, and is more interactive than collaborative teacher support services.

My recommendation is to examine the extent to which parameters of co-constructive experiences are shaped by prior beliefs, experiences, theories and practices of working partnerships. Indeed, borrowing the templates and minimal conditions for co-construction offered in this study may support new understandings about when, how and why interactive learning can be facilitated. As in this study, initially positive, functional relations supported and confirmed my developing beliefs about co-construction. Dysfunctional experiences enhanced my learning about co-construction and provoked refinement towards the study generalizations given here. Future users of co-construction theory and practice will benefit from experiences that both confirm and challenge their understandings of effective co-construction.

Finally, the third generalization claims co-construction may encourage a culture of learning in schools. Readers may recognize features of the co-constructive process in their prior learning experiences and value co-construction as a possible way of working that they can “connect with” (Mann, 2002). Re-examining interactive learning experiences can assist one to recognize opportunities for co-constructive theory and practice. The fundamental principle is that personal constructs direct
actions. Principles of social judgement theory can be used to predict and interpret responses to learning opportunities.

Those who have embraced co-construction opportunities as helpful, acceptable and appropriate for students at educational risk, are more likely to use co-construction theory and practice in the future. Teachers who have positive experiences of co-constructing classroom language development practices are more likely to work this way with others. Further changes to pedagogy, learning outcomes and school systems can be co-constructed within an accepting, interactive learning community.

These generalizations specify the theme that co-constructed learning enhances teaching. Teachers, as interactive learners, bring personal insights about learning to their teaching of others. Each teacher has a repertoire of expertise that connects to possibilities within the work place, intended practices and desired learning outcomes. Self-reflection encourages the identification of expertise that other’s have and that we might develop. Co-construction processes empower participants to achieve more and different outcomes with others than they can alone.

In developing and using co-construction theory I learnt ways to participate in the exchange and building of teacher thought and pedagogy. Repeated patterns in teacher-researcher interactions, confirmed the importance of personal constructs, prior experiences, theories, beliefs and practices to future pedagogy. Co-constructive processes transformed current thought and practice to greater classroom language expertise and made changes explicit for participants. Research participants agreed that co-constructed classroom plans were greater than the sum of individual parts.
Summary

The co-construction of thought and classroom practice effects transitions in teacher thought and pedagogy, builds expertise and may encourage a culture of learning in schools. Co-construction is a way for teachers to address their own learning needs, as well as, those of their students, their teaching peers and visiting specialists.

The next and final chapter confirms connections between these study generalizations, research questions, multiple data and relevant theory. There I review the effectiveness of this constructivist interpretive approach to action research.
Chapter 8

Co-constructing changes to classroom practice: Insights from qualitative data

“The future of an organization is perpetually constructed in the conversational exchanges of its members as they carry out their tasks.”

(Stacey, 2001, p.181 in Fullan, 2003, p. 44.)

Introduction

A decade ago, Fullan (1993) claimed that teachers needed a new mindset from which they could “deal with change, learn from it, and help students learn from it” (p. ix). He discussed ways that educators could become “agents, rather than victims of change” (ibid). Here, co-construction is presented as a system for unprecedented commitment to the sharing, negotiation, reflection on and intentional building of new thoughts and practices with classroom teachers.

In this study participants shared, exchanged and built theories of practice. As sharing made constructs and practice more explicit, the teachers and I transformed our individual mindsets to co-constructed pedagogy for early childhood classrooms. We came to understand how to influence transitions in personal constructs and pedagogy. We became active participants in change. Now, insights from this study are drawn together and connections to data made explicit.

In earlier chapters, I have discussed co-construction theory and practice as the next stage on from social constructivism, a way to enhance the professional development of teachers, and a way to effect change in teachers, teaching and schools’ language support systems. Here I leave the structured narrative to complete a final analysis of research data, methods and conclusions. I invite readers to be challenged, enthused and stimulated as they reflect on, critique and consider the place of co-construction in their work.
Research: Questions, outcomes and implications

Perry (1995) supports the use of action research by doctoral candidates but cautions that the thesis “may be messy, inconclusive and may be unrelated to propositional knowledge published in the literature of a discipline” (p. 9). Mindful of that caution, my purpose in this chapter is to reiterate connections between research questions, action research cycles, data sources, analytical statements, generalizations and relevant supportive literature. In this way, I argue that since “research has become a much broader set of activities,” researchers must choose from the array of approaches and methods to address the issue, context and purpose of their research (Stringer, 2004, p. v). Indeed, Stringer supports the effectiveness of action research as a way to “assist educators and families (to) improve their educational practices” (ibid). I believe that the current research demonstrates that potential.

Structured narrative supported the discussion of research questions in Chapter 1, my choice of participatory action research in Chapter 2, and details of the Language Development Project in Chapter 3. The development of analytical statements and subsidiary questions to interrogate data (as discussed in chapters 4, 5 and 6) explains action research as an appropriate methodology for this study. The deliberate use of constructivist interpretive methods with the participant teachers adheres to Dick’s (1993) recommendation, “participation by the client group as informed sources of information gives you a better chance of discovering what they know and what you currently do not” (p. 16). In turn, research generalizations (Chapter 7) are borne out of “legitimate rigorous action research methodology” that requires an explicit methodological framework (Dick, 1993, p. 18). That framework, detailed in Chapter 3 counters concerns that participatory action research is otherwise a “generic methodology” sometimes chosen when the research context is too ambiguous to allow a more detailed choice (Dick, 1993, p. 19).

The explicit framework, in this case constructivist interpretive method, developed alongside action research questions and processes to pursue, refine and challenge developing generalizations. In this study, teacher input and co-constructive processes were the focus as well as the method of investigation. Hence my use of iterative methodologies that reconciled data interpretations, the integration of participants’
opinions, researcher observations, reference to literature, triangulation, and further data, to this one report. The focus in Chapter 7 was on the content of research generalizations. In this final chapter I present research methods and connections in tables with the intention of leaving no doubt that the research processes selected, sustain previous generalizations.

**Responses to research question one**

In Chapter 3, Appendix K was referenced to represent connections between each action research cycle, teacher and researcher involvement. Now tables one through three focus on each original research question and clarify connections to the action research cycles, data sources, analytic statements, generalizations and available theory. I begin with Table 1 and research question one, *To what extent do teachers’ personal constructs of language-based educational risk determine their pedagogy for students at risk.*

Prior to this study, both personal construct theory and social judgement theory were applied to numerous practical situations in which beliefs and judgements were known to influence the actions of individuals. Vygotskian theory was well known in relation to children’s learning with implications for teaching processes (Wilhelm, 2001; Wilhelm, Baker & Dube, 2001). In this study, connections between personal construct theory, social judgement theory and Vygotskian thinking guided and engaged my interpretations of teachers’ data specific to their learning about teaching.

Feasible connections between teachers’ personal constructs and personal pedagogies stimulated the first research question in this study. An important and practical issue was that of supporting teachers to consciously and confidently select and implement appropriate pedagogy for students at educational risk within their classrooms. Teachers collectively identified a need for support with this task. Neither they, nor I, consciously understood the importance of personal constructs as a basis for explaining current pedagogy or as a fulcrum of change, prior to engaging in this study.
### Table 1. Data, research processes and literature relevant to research question 1

<table>
<thead>
<tr>
<th>Focus</th>
<th>A.R Cycle</th>
<th>Data</th>
<th>AS</th>
<th>Generalization</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructs &amp; Practice</td>
<td>1</td>
<td>Participant observations,</td>
<td>AS1</td>
<td>1</td>
<td>Batten, Marland</td>
</tr>
</tbody>
</table>

**Note.** AR = Action Research (cycle). Underlining indicates that AR cycle 1 was when foundational data for this research question were collected. AS = Analytical Statement (number). *Co-constructed practice is documented as detailed in Chapter 3 to include working notes from discussions and planning with participant teachers, dated daily lesson plans for each early childhood class, further oral and written language samples / assessments collected during the implementation of classroom activities, copies of teacher-researcher activities prepared for classroom use, notes detailing activities and outcomes (given to teachers after each shared classroom session) and incidental written correspondence between research participants. Dates, teacher identification codes, school year level, classroom numbers, and student identification codes were added as appropriate to each data type.
As the teachers and I identified students at educational risk and theorized about their classroom learning and teaching needs, we shared reflections on actual and proposed classroom practice. The research emphasis shifted from a focus on the importance of the OWLD, to influential factors shaping teachers’ thoughts and pedagogy, and then to the potential of co-constructive processes for changing teachers’ thoughts and pedagogy. Throughout the project, theory and practice were interrogated, informed or contradicted by research data so that the theory and practice of co-construction evolved from classroom research. Now, generalization one claims, *Co-construction effects transitions in teacher thinking and pedagogy.* This is an outcome of emancipatory action research (Carr & Kemmis, 1986; Perry & Zuber-Skerritt, 1992).

Over the research year, our shared reflections and interpretations of data about influential factors confirmed the importance of reciprocal, interactive, intentional and continuous learning for effective co-construction. When teacher Penny was invited to review her thinking and practices in Term Four she stated,

> I don’t consider myself an expert so I would hate to jump in with some strategies but… I’ve got a pretty good idea of what works and …how the child will go (T1PDI266). I think all the strategies you’ve introduced to me, I could use again… whether it’s in a small group or the other ideas we’ve come up with for the whole class. So I’d definitely use them (TIPDI267).

Penny volunteered information about what she would do when she recognized a need for further learning. “If there was something that was out of my depth then I’d go to a specialist… But I’m very happy to do any strategies at the moment because… I have seen from those strategies what can happen” (ibid).

The first generalization claims that co-construction effects transitions in teachers’ thinking and pedagogy. Indeed, co-construction was a means of selecting, organizing and interpreting classroom information and interrogating diverse understandings through action research. Given that some teachers’ tacit personal theories only become clear (or clearer) to them when they engage in metacognitive processes such as co-construction, there are potentially many factors determining co-constructive outcomes.
In Chapter 7, I suggested that both classroom teachers and those with specialist language skills might benefit from co-constructing classroom planning, to enhance their understanding of teaching and students’ learning. Without transformation in teacher thought and pedagogy, co-construction fades from being a tool of choice towards best practice in primary pedagogy, to a description of another collaborative partnership. Incremental change is always the intended outcome of continuous co-construction of language development plans with classroom teachers. More specifically the intent is to build theoretical perspectives accommodating particular classroom contexts, participants’ constructs and current child language and early childhood education theory.

Co-construction towards the implementation of best practice language teaching with classroom colleagues provides numerous opportunities for change in participants’ thinking and pedagogy. The templates given in Chapter 5 along with the six minimal conditions for effective co-construction (in Chapter 7) may support the future use of co-construction processes as matched to participants and their contexts of use.

**Responses to research question two**

Research question two asked, *Which influential factors shape early childhood teachers’ thoughts and pedagogy for students at educational risk?* Connections between this question, research processes, data, available research and generalization two, are given in Table 2. In previous chapters I have detailed how research participants came to know that processes such as reciprocal and interactive learning and personalized co-construction, influenced the building of participants’ language development expertise. This tabular representation confirms the research framework supporting the second generalization. *Co-construction builds expertise.*
<table>
<thead>
<tr>
<th>Focus</th>
<th>A.R Cycle</th>
<th>Data</th>
<th>AS</th>
<th>Generalization</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influential factors in co-construction</td>
<td>1</td>
<td>*Co-</td>
<td>AS3</td>
<td>2</td>
<td>Bannister &amp; Fransella, 1974;</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>constructed</td>
<td>AS4</td>
<td>Development of</td>
<td>Fransella, 1974;</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>practice,</td>
<td>AS5</td>
<td>of</td>
<td>Batten et al., 1993;</td>
</tr>
</tbody>
</table>

Note. AR = Action Research (cycle). Underlining indicates the AR cycles in which most data for this question were collected. AS = Analytical Statement (number), *Co-constructed practice is documented as detailed in Chapter 3. Of relevance here are working notes from discussions and planning with participant teachers, dated daily lesson plans for each early childhood class, further oral and written language samples / assessments collected during the implementation of classroom activities, copies of teacher-researcher activities prepared for classroom use, notes detailing activities and outcomes (given to teachers after each shared classroom session) and incidental written correspondence between research participants. Dates, teacher identification codes, school year level, classroom numbers, and student identification codes were added as appropriate to each data type.
Connecting data to research questions and generalizations in tabular form is a useful way to summarize the complexity of action research processes through sequential research cycles. Yet, tabular presentation does not highlight the relative importance of the multiple data types to the iterative process as in previous chapters. For example, the question of perceived expertise for individual teachers, while able to be observed, discussed and intentionally co-constructed, was more accurately portrayed in the teachers’ words. Spontaneous discussions, written reviews of the LDP each school term, teachers’ evaluations of the Language Development Project in Term Four, and the triangulation data elicited from teachers by other researchers, all demonstrate the importance of participants’ voice as well as researcher interpretations. The following reflective comments from participant teachers provide further evidence of this fact.

When asked to reflect on the outcomes of the LDP in her class, half way through the research year, Toni wrote, “I like observing your little group and putting ideas into action” (T2T, 29/6/00). She added spontaneously,

The written reporting is fantastic, but only give me what you need to. The most useful feedback is the immediate feedback at the end of a session. It is verbal and I can clarify any questions… If I only learn a few strategies to make me a better teacher- it is worth it (ibid).

These comments were significant at a time when I was personally disappointed that Toni and I were not engaging in more shared planning. This written feedback, from Toni’s point of view, suggested that the perceived benefits of the LDP were greater than I had interpreted for her. Later in the year Toni provided a brief written evaluation of her learning during the LDP. She commented on new strategies being the most useful feature of the LDP. “I have some new strategies to use and I have seen success with kids” (T2TE21/11/00).

The importance of multiple opportunities to provide data, and different modes of contribution is also displayed by Toni’s data. She usually gave lengthy, detailed and anecdotal responses during interviews and spontaneous discussions. She expressed her preference for oral, rather than written interactions, frequently during the
research year. During her final interview (6/12/00) Toni reflected on her perceived need for further language specialist input. “We’re just saying this kid needs to be looked at more closely. Then we will do our job as teachers but early intervention is the key” (T2TDI209). She reflected on her learning, and that of her peers, through this action research,

That’s the one thing as teachers we’ve learnt. We do reading and spelling but I think what you have shown us is that the oral really seems to be the first one (T2TDI210). What you’re saying is what you use… we’re getting more aware… 12 months down the track we’ll have a bit more expertise, like (Penny’s)… That’s what you can do with a bit of help and assistance (T2TDI212-214). Bringing it into the classroom makes it practical (T2TDI229).

Similarly, I relied on the comments of Teacher 4, Suze, to know how she was feeling and what she was ready to address next in our co-construction. Suze was very open to co-construction but early in her first year of teaching, she “didn’t know what she needed to know” (T1S,29/2/00). Suze wrote at the end of school Term Two that she had learnt strategies such as “sounding out, clapping words, counting words on fingers, (and) listening strategies” (T1S,3/7/00). She added that she considered the language development strategies we had shared as beneficial for the whole class but she requested more explanation to understand the strengths and needs of individual children because of her “lack of experience” (ibid). Suze’s written evaluation of her learning through the year included, “great strategies for helping children with reading” (T1SE21/11/00). She added that she had been encouraged to try new language development strategies such as “editing work and ‘planning’ sentences orally before writing them” (ibid).

Suze’s words affirm her expectation to learn more and her ability to focus her learning by initiating co-constructive discussions. For example, Suze’s intent to learn more about the identification of children with problems was clarified by her written evaluation (ibid). Soon after, Suze’s final interview, confirmed her intent to focus on ways to observe and report on learning outcomes for individual children (T1S,30/11/00). She planned to implement appropriate strategies learnt and used
during the LDP to her upper primary class in another school in 2001 (T1SE21/11/00).

When reviewing Term Two outcomes as planning for Term Three, teacher Jacqui, commented on her expertise relative to her students’ needs. She wrote: “The children are developing an awareness of their speech and also ways to correct themselves. Children are demonstrating learnt strategies to deal with their various speech problems” (TKJ29/6/00). I had observed Jacqui using co-constructed strategies with her students. Her self-evaluation indicates the value of nuances expressed through her self-reflections. “I need to familiarize myself with these strategies further so that I use them more frequently and more confidently. I try to integrate strategies during mat times or incidentally (but I) would like to become more confident in doing this” (ibid).

At the time of her final interview in Term Four, Jacqui commented on the usefulness of our written documentation during the year. She explained her plan to further develop her confidence and expertise with speech-language strategies for early childhood students. “I’ve got all the stuff you’ve given me in a file… especially the specific strategies” (TKJDI 119-120). Jacqui added,

Even when next year’s people come in… I can teach myself. Quite a few of the (strategies) I use. There’s others I’m not so familiar with and so (I) tend not to use them because (I) have to be ready to use them (TKJDI123-124).

The next day, Jacqui wrote that she had learnt, “that some children need to develop a variety of strategies to assist them with their language, and different ways that I can help them” (TKJE21/11/00). She added that she would like to learn more about “developing these strategies and being able to identify specific strategies children need” (ibid).

These examples show the essential use of teacher data to verify researcher observations and interpretations in action research. As suggested throughout this text, constructivist interpretive processes translate classroom-based action research from a focus on the practical activities to research that confirms how and why change
processes occur. Working with teachers, I was able to show that co-construction theory and practice extends teacher reflection and makes explicit the ways in which teacher reflection can contribute to self, peer and student learning. Co-construction relies on deep respect and demonstrable understanding of individual teachers and their particular classrooms to open relationships to learning, for individuals and with peers.

Elbaz (1987) attended to “the process by which teachers become aware of their knowledge” (p. 46) to recognize gaps between teachers’ perspectives of their knowledge and researcher reconstructions of teacher perspectives. As in co-construction, she concludes that teacher reflection needs to be followed with opportunities to generate and extend different views, so that the process of change becomes “self-sustaining” for independent teachers (p. 52). The examples from Toni, Suze and Jacqui (above) show that they all expected to sustain their professional development.

The current research supports Elbaz’s (1987) recognition of the need for reflection and exchange as agents of change in teacher thinking and pedagogy. In this study numerous examples and interpretations from teacher participants, through four cycles of action research, were required before I could offer a theory base and practical templates for co-construction. Extensive data and a constructivist interpretive approach to analysis and generalization contributed to our understandings about how and why co-construction processes can provoke teacher change in thinking and pedagogy.

In particular, Maree’s story (Chapter 6) explains the importance of the active sharing of constructs, ideas, issues and practical activities so that reflections on classroom practice are the catalyst for, rather than the primary method of, change. In her written evaluation, Maree reflected that through the LDP she had become “much more aware of the need to constantly listen and role model specific speech patterns for individual children” and that she “felt confident to use the new strategies and that (her) old techniques are OK” (TPME21/11/00).
Generalization two claims that co-construction builds expertise. The diversity in outcomes and processes used with individual teacher participants through this action research suggests that transformations in teachers’ thought and pedagogy are potentially endless. This study responds to Diamond’s (1991) belief that teacher education should focus “more on teachers’ subjective experiences and less on objectively gathered or received information about teaching and learning” (p. 11). Co-construction addressed the need to support teachers to plan for their students at educational risk in their classrooms. By acknowledging and valuing teachers’ initial concerns, unfamiliarity, challenges and confusions, we could move to co-constructing explicit and appropriate pedagogies with these students.

**Responses to research question three**

Research question three asked, *What are the implications of the co-construction of classroom language development plans for effecting transitions in teacher thought and pedagogy?*

Table three illustrates connections between this research question, action research cycles, data, analytical statements, relevant theory and the third generalization. *Co-construction may encourage a culture of learning in schools.* As discussed in Chapter 7, this generalization suggests that co-construction processes can inform future pedagogy, learning outcomes and school change. Given that question three is about the potential of co-construction, teacher data from this study can be used to indicate intent but not confirm later outcomes from this action research specific to teachers’, students, the project school or other educational contexts.
Table 3. Data, research processes and literature relevant to research question 3

<table>
<thead>
<tr>
<th>Focus</th>
<th>A.R Cycle</th>
<th>Data</th>
<th>AS</th>
<th>Generalization</th>
<th>Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-construction of practice</td>
<td>1</td>
<td>*Co-constructed AS12</td>
<td>AS13</td>
<td>3</td>
<td>Bennett, 2003;</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Potential</td>
<td></td>
<td></td>
<td>Clark, 1992;</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Staff</td>
<td></td>
<td></td>
<td>Elbaz, 1987;</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>workshops,</td>
<td></td>
<td></td>
<td>Fullan, 1993;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&amp; P.D.</td>
<td></td>
<td></td>
<td>Fullan &amp; Hargreaves, 1996;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final</td>
<td></td>
<td></td>
<td>Hall &amp; Jones, 1976;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>teacher</td>
<td></td>
<td></td>
<td>Hargreaves &amp; Fullan, 1992;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>interviews,</td>
<td></td>
<td></td>
<td>Joyce &amp; Showers, 1988;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Triangulated</td>
<td></td>
<td></td>
<td>Ladieshewsky, 2004;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>data,</td>
<td></td>
<td></td>
<td>Loucks-Horsley, 1996;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staff</td>
<td></td>
<td></td>
<td>Mann, 2002;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Daily</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>journal.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. AR = Action Research (cycle). Underlining indicates the AR cycle in which most data for this question were collected. AS = Analytical Statement (number).

*Co-constructed practice is documented as detailed in Chapter 3. Of relevance here are working notes from discussions and planning with participant teachers, copies of teacher-researcher activities prepared for classroom use, and incidental written correspondence between research participants. Dates, teacher identification codes, school year level, classroom numbers, and student identification codes were added as appropriate to each data type.

Another indication of the co-construction processes having encouraged a culture of learning in the project school comes from the staff written evaluation sheets. All of the teachers who completed the project evaluation identified aspects of early childhood language development that they would like to know more about. All except one gave reasons why they would implement language development strategies, as used in the LDP, with other students in the future (TKJE21/11/00;
Diamond (1991) refers to the “transformation of teacher’s orientation towards his or her practice” (p. 47) as one of great potential for school change. He challenges teacher educators and researchers to support teachers “to see themselves as self-directing and self-determining, as professionally competent and as capable of trying alternative pedagogies” (p. 51). In any school there will be alternative viewpoints, interpretations and responses to change. Co-construction draws out these multiple voices to contribute to new perspectives. Teachers are encouraged and empowered to participate in change rather than to resist constructs incompatible with their own. Co-construction is a mutual rather than an elitist view of teacher support.

The influence of opportunity to plan one’s change cannot be underestimated. Diamond (1991) recommended the revisiting of Kellyian principles of personal construct theory, and considering socially constructed learning, to facilitate change in schools. The current study extends Diamond’s ideas from what is desirable to what is possible. Since the potential for change is enhanced when learning is negotiated and shared, study outcomes raise questions about the possible application of co-construction to teacher education, performance management and school change.

Richert (1997) also discussed the challenge of change for schools. As in the current study, she reiterated the importance of teachers as learners acting with intent in their classrooms, and their need to join with parents, other teachers and administrators to implement change agendas for schools. Here, the experience of co-construction demonstrates how the negotiation and sharing of classroom thinking and practice prompts consideration of whole school issues such as future professional development and teacher support services. Teachers engaged in classroom-scale change were inclined to contribute their opinions about whole school issues.

In 1993, Fullan wrote that teachers were not yet positioned to play the vital role as change agents. However, he pre-empted the individual as “inquirer and learner” also
able to contribute to the shared purpose of teamwork (p. x). Fullan acknowledges the current and increasing complexity of teaching as a job. Given the constancy of change in school environments, Fullan encourages teachers to extend what is valued and effective so that others can learn to contribute to change. Teacher stories in the current study showed how teachers spontaneously shared their successes with others. Here, co-construction is a way to learn about change. A cautiously optimistic view is that it is also a way for teachers to “teach change” to peers and administrators.

**Common outcomes**

My conviction regarding the value of structured narrative to report this action research is based on the notion that co-construction is about effecting change with individuals, given the current culture, policies and practices of their schools. This study provides general and specific templates for co-construction processes, proposes six minimal conditions for effective co-construction, and hypothesizes about the overlap between consultancy, collaborative and co-constructive approaches to teacher support. These are the (developing) theoretical outcomes from this action research.

As such, the tentative theory of co-construction supports an essentially practical task. One can generalize outcomes for the ten participant teachers in this study. (Later I do so.) However, the drawing of commonalities is necessarily a cautious representation of co-construction. For some time I resisted the tabulation of commonalities in data or outcomes for subgroups of teachers. My concern was for the relative importance of lengthier, personalized data to represent effective co-construction. As a co-constructive partner, I expected to put effort to personalizing co-construction processes. I expected diverse outcomes for individual participants.

Commonalities in outcomes for teacher participants are feasible and, at times, useful as teachers choose to work together on common issues. However, co-constructed change, by definition, does not “aim for” common content, uniform processes or identical outcomes for individual participants. Selected teacher stories have been told to establish the premise that personalization to each teacher’s strengths, needs and context is a positive feature of co-constructed change.
I acknowledge the discussion by Dick (1993) of the trade off between responsiveness and replicability in action research. Co-construction is about change. Action research was the most suitable method of researching intended change in classrooms because it could accommodate the specifics of classroom contexts, encourage teacher participation and build constructivist interpretive processes into the research spirals. Hence, research outcomes feature a high level of responsiveness. The changes demonstrated were designed and achieved in the project school.

An alternative way to examine action research is to acknowledge its poor reputation for generalizability (Dick, 1993) and to qualify general assertions, as I do here. The tentative theory of co-construction is certainly generalizable to other school contexts. This means that one could use the templates for co-construction, evaluate the culture of learning in other schools against the six minimal conditions described in this research and accept the relative benefits of consultancy, collaboration and co-construction for staff development. Personalization processes within each school and classroom would guide the replication of this theory. Personalization is a defining feature of co-constructed practice. Personalization requires flexible, reciprocal, interactive, co-constructed learning and teaching.

Indeed, the application of co-construction frameworks from this study to other educational contexts could encourage further development, critique, amendment, rejection or improvement of aspects of it. The application of co-construction theory, implemented through action research cycles, could be considered as an attempt to replicate this study. Constructivist interpretive review processes could account for the different common outcomes or the recognition of alternative or additional influential factors to those identified here.

My hope is that those who embrace this research will do so cautiously; that they will hear the need to personalize processes, to delve deep into the specific characteristics of classrooms and reflect on the influence of particular school contexts; rather than apply these frameworks with a “one size fits all” mentality. So, why report common outcomes?

I have three reasons for doing so:
1. To reiterate the ways in which co-construction “worked” for all participants, albeit with explicit features unique to each teacher and classroom,

2. To provoke connections for readers between commonalities and features they recognize in their own teaching contexts. In this way the generalizations given in Chapter 7 can be “tested” as needed, by the future implementation and critique of co-construction theory and practices.

3. To represent the potential of a constructivist interpretive approach to action research. A constructivist interpretive mindset expects that theory and practice will be modified with the benefit of additional data, other contexts and alternative worldviews. That is what constructivist interpretive thinking celebrates. The only “correct” interpretation of qualitative research is that created and verified through reciprocal action and dialogue, by the participants in the participatory research context. As in this research, non-participants can triangulate findings against the participant researcher’s interpretations but they cannot say, “what is,” for the participant teachers.

Given that co-construction aims to be a highly responsive process, and having qualified the possible replicability of this study, Table 4 itemizes outcomes from this action research project for all, or most, teacher participants. The main data types used to substantiate these outcomes and relevant chapter references are given. In summary, Table 4 shows that co-construction processes within the project school engaged participants in the explicit and purposeful sharing of their expertise. The common intent of research participants was to enhance students’ learning outcomes, particularly for students at educational risk.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Teachers</th>
<th>Chapter</th>
<th>Data type (main)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Able to describe a personal theory of educational risk.</td>
<td>all</td>
<td>4</td>
<td>initial interview</td>
</tr>
<tr>
<td>2. Acknowledged students as SAER (“focus children” for LDP).</td>
<td>all</td>
<td>4</td>
<td>initial interview, participant observation, OWLD1-4</td>
</tr>
<tr>
<td>3. Commented on characteristics of educational risk that were not language-based</td>
<td>all</td>
<td>4</td>
<td>as above</td>
</tr>
</tbody>
</table>
4. Expressed a lack of confidence in their accurate identification of students at risk, (linked to limited expertise with ECE or SAER).

5. Acknowledged that managing SAER children was “part of teaching” (T2T9Di32)

6. Perceived that some expertise with child L.D. or E.C. was necessary to identify SAER.

7. Described students to illustrate personal constructs of educational risk.

8. Drew conclusions about SAER from observing and interacting with them in class.

9. Requested practical strategies for supporting SAER in classes.

10. Needed support to translate OWLD1 to L.D. strategies for classroom use.

11. Opinioned that OWLD1 alone would not significantly shape pedagogy for SAER.

12. Accepted co-construction as an opportunity to improve pedagogy for SAER & EC.

13. Used Summary of sessions list given at the end of school terms 2 & 3.

14. ‘Input’ to ensure that L.D. planning was acceptable and appropriate to context & teacher.

15. Increased specificity in discussion of L.D., SAER & EC pedagogy during the year.


17. Reported increments in L.D. expertise & confidence as an outcome of the LDP.

18. Metacognitive awareness of change

19. Teacher voice and interactive learning processes influenced co-construction.


21. Expected to continue own learning about L.D. &/or ECE

22. Voluntary participation for duration of time employed in ECE at the LDP school.
Table 4 (contd.). Common outcomes for teacher participants in the Language Development Project.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Teachers</th>
<th>Chapter</th>
<th>Data type (main)</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Input to researcher learning.</td>
<td>all</td>
<td>4-8</td>
<td>all</td>
</tr>
</tbody>
</table>

Note. L.D. = language development, E.C. = early childhood, SAER = students at educational risk.
*Co-construction data summarized in this table refers to some or all of the following documentation: working notes, daily lesson plans, OWLD1-4, further oral & written language samples, copies of classroom activities, notes to teachers detailing class activities and outcomes, incidental written correspondence. Dates, teacher identification codes, school year level, classroom numbers, student and parent identification codes were added as appropriate to each data type.

**Action research and action research theses**

The consideration of common outcomes for teacher participants from this action research, functions like an overview of the more detailed and informative narrative. Common outcomes can convey the sense of the change expected and achieved through the action research. Indeed, some readers might suggest that common outcomes demonstrate that the action research has been “worthwhile”. However, as discussed by (Perry, 1995), a thesis is distinct from the actual action research project.

Perry and Zuber-Skerritt (1992) describe two criteria for PhD action research, both of which are addressed here. Perry and Zuber-Skerritt state that PhD core action research needs “to progress through at least two or three cycles to uncover a distinct contribution to knowledge” (p. 205). They specify that the understanding gained in the reflection phase of the first spiral should be transferred to the second spiral. For example, Chapter 3 details how teacher participants’ reflection on the OWLD1, developed during the first action research cycle, redirected the action focus to co-constructed practice, for the second and third research cycles. Perry and Zuber-Skerritt also stipulate that PhD action research should approach emancipatory action research (rather than being merely technical or practical).
According to definitions provided by Perry and Zuber-Skerritt (1992), the Language Development Project can be described as “technical” because the aim was to facilitate the professional development of participants. The LDP is also “practical” because co-operation, participation and self-reflection by participants were encouraged (p. 205). Furthermore, the Language Development Project could be considered emancipatory since research participants share responsibilities within the project, establish collaborative relationships and aim to critique the research action against established practices (ibid). I argue that the constructivist interpretive approach to forming research generalizations, and the distinctions made between consultancy, collaboration and co-construction approaches to teacher support (in Chapter 7); are further qualifying features of emancipatory action research.

I reflect now on the use of structured narrative to explain the development of co-constructive theory and practice in one school. A critical point is that the constructivist interpretive approach necessitated the analysis and interpretation of multiple data prior to the selection and reporting of data, in any form. Extensive data were elicited and organized from multiple sources, in various ways, to provide an extensive array of thick data from which the most illuminating examples could be reported. Both the quantity and quality of the data collated from this action research facilitated the use of typical and atypical data at appropriate points in the narrative.

Narrative reporting does not require researchers to “force distinctions” (Clift, Cyster, Russell & Sexton, 1978, p. 103) as with the alternative process of construct organization using repertory grids. In this study, I was able to explore and report issues and questions arising as they contributed to an understanding of co-constructed change. Since conducting this thesis, the work of Stringer (1996) has been helpful in planning the presentation of research processes and findings to participants and other audiences. In particular, Stringer’s work on the use of concept maps, like that of Bennett & Rolheiser (2001) has encouraged my use of graphic organizers to represent connections between research theory, data and implications. (Appendix L indicates presentations of this work in progress.)

Appendix N is an example of an alternative representation on the concepts introduced in Chapter 1. Appendix K shows the overlap between action research...
cycles. The action research spiral (Dick, 1993) and graphic organisers (Bennett & Rolheiser, 2001) are familiar to many teachers. The use of graphics to facilitate critical discussion of co-construction theory, processes and outcomes also accommodates Mann’s (2002) recognition of the need for various research reports to suit different audiences. The idea of revisiting original data in several formats with other teacher groups is potentially educative, for teacher participants and myself.

**Strengths and limitations of this study**

Full consideration of the potential for co-constructed language planning in educational settings acknowledges the limitations, as well as, the benefits of the co-construction processes. In fact, some personnel will perceive strengths of co-constructed practice, as limitations. Inclusivity is one example. One’s judgement of the advantages or disadvantages of inclusive classroom practice will determine how co-construction is regarded. Consider the following statements:

- Co-construction is inclusive. Educators who accept withdrawal-based service provision may perceive classroom-based, teacher-driven language development practices as contrary to their current thinking.
- Co-construction takes time. The intention is to work towards improved outcomes, within the time available.
- Outcomes and generalizations have not been tested with participants who are continually resistant to co-constructive attempts.
- The facilitation of co-construction requires openness to learning with, and from, others.
- Co-construction requires expertise in the focus area (such as early childhood language development, here). Expertise is difficult to quantify. However co-construction demonstrated the importance of each participant’s unique expertise. Most participants spontaneously shared their learning.

In summary, this research demonstrates the teaching and learning outcomes achievable through co-construction. I believe the time and effort involved in the initial development of co-construction processes in educational settings is most worthwhile.
I also acknowledge some limitations of methodologies used in this research. Again, the perception of limitations (or strengths) can be linked to one’s experiences, theories and worldview. For example,

- Some researchers (Shulman, 1987) recommend that the study of accomplished practice is the way to understand best practice. This study uses ordinary teachers in a rural school.
- Education research is currently outcomes-based. The focus here is to teachers’ learning outcomes, in the belief that high quality teaching improves students’ learning outcomes (Fullan, 1996; Rohl & Rivalland, 2002).
- This study does not compare teachers’ practice. My intent was to pursue what teachers could accomplish with support, rather than to report how a sub-group of teachers excelled as individuals.
- As discussed above, action research is more responsive than able to be generalized (Dick, 1993). This research meets criterion set by Shulman (1987). Teacher data in context based research “is evidence that real teachers engage in it” (p. 370).
- This research relied on the commitment of the participants (Dick, 1993). All ten teacher participants chose to remain in the project.
- Multiple data sources are time-consuming to analyse. They also provide choice in reporting so that presented data maximizes learning (Stake, 1995).
- Structured narrative is lengthy and complex. Here, the selection of teacher data best represented the effective development of co-construction processes.
- Classrooms are complex research contexts. Participant teachers help to inform readers about the contexts and social processes in which they work.
- This research is not “scientific.” This constructivist interpretive approach to action research demonstrates how meaning and learning are “embedded in each cultural context” (Stringer, 1996).
- This research reports educational change via structured narrative. I use the narrative style to reiterate the uniqueness of the change experience for research participants. As stated by Dalin (1998), “The more complex the change, the less you can force it. Change is too important to leave to the experts; personal mind-set and mastery is the ultimate protection” (p. 121).
This thesis is non-standard. Alternatively, this thesis displays variety of form to suit the phenomenon of interest, the context and the participants (Latham, 1999). I have consciously shaped this text to provoke images and associations for understanding (ibid), as well as, to acknowledge the requirements of academic writing (Yagoda, 2004).

The current study suggests that the theory and processes of co-construction apply to real teachers with a range of expertise. However, the potential for co-constructive processes to facilitate change in teacher thinking and pedagogy needs to be examined in broader educational contexts. Future research is likely to reiterate the importance of individuals and classroom contexts as important to understanding teacher change. Studies such as the current one encourage future researchers to understand, “the gains in perspective” despite the “intensive and interpretive” demands of qualitative research (Stake, 1995, p. 46).

Final comments

Pope and Keen (1981) described “constructivist alternativism” as an innovative way forward in education (p. 34). Perhaps after decades of promise, the potential of personal construct theory can be realized. Co-construction is a way to transform teachers from isolated professionals confronted by change to a more confident, self-directing profession aware of their own expertise. Outcomes show that early childhood teachers “can be led to formally and systematically reflect on their practice in a way that has a potential to make a real contribution to developments in education” (Batten & Marland, 1993, p. 74). Teachers inform research as researchers facilitate teachers’ learning. That is the direction of school change.

Classroom-based constructivist interpretive research is complex. There exists a persistent need to include the reality of teachers, students, parents, administrators and school politics whilst keeping track of the changing research focus. The priority need is for teachers to teach, and students to learn. Some outcomes are difficult to document. They are subjective, context and personality specific, and filtered by the worldviews of the teller. Yet these are the gems of classroom based action research. They have impact when heard through structured narrative in this research genre.
Through this research, I was refreshed and educated by the honesty and connectedness of the teachers’ voice. My task was to sift and select, to hear, interpret, verify, explain, co-construct and report. In the end, I understood that teachers tell their own stories more accurately than I ever could. Hence, I collected extensive data from ten participant teachers and reworked these teacher stories to one narrative. Four teachers maximized my learning. All contributed. During this process, like Stringer (2004), I reviewed my academic understandings for their relevance to the multifaceted challenges faced by teachers in classrooms and in their everyday community life. We co-constructed.

This thesis captures and shares the development of co-construction theory and practice through my reciprocal learning with participant teachers. Here I present constructivist interpretive, action research methodologies. They depend on the contributions of teachers, and support by researchers who believe in the possibility, and value, of this genre of qualitative research.

**Summary**

Through this research I expected to learn how to better support early childhood teachers as they planned and implemented language development practices for their students at educational risk. Instead, “co-construction” developed as a way to learn and teach “change.”

This research details systematic, interactive and reflective processes to “make education better” (Wellington, 2000, p. 183). Like Wellington, I contemplate the broad purpose of educational research. Unless educational research improves pedagogy, learning outcomes and school change, why do it? My understandings were co-constructed with early childhood teachers who taught me how to learn with, and from them. Teachers as research partners enhance interpretations of teaching, learning, educational change and the potential of qualitative educational research. All four matter. They contribute to professional growth, personal satisfaction and learning outcomes.


Appendix A

**Teacher participants’ professional experience in early childhood classrooms**

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Number</th>
<th>Years as teacher</th>
<th>ECE training?</th>
<th>Years taught ECE classes (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jacqui</td>
<td>1</td>
<td>8</td>
<td>yes</td>
<td>8</td>
</tr>
<tr>
<td>Maree</td>
<td>2</td>
<td>15 or more</td>
<td>yes</td>
<td>15 or more</td>
</tr>
<tr>
<td>Peta</td>
<td>3</td>
<td>2</td>
<td>no</td>
<td>2</td>
</tr>
<tr>
<td>Sheryl</td>
<td>4</td>
<td>15 or more</td>
<td>yes</td>
<td>15 or more</td>
</tr>
<tr>
<td>Penny</td>
<td>5</td>
<td>1</td>
<td>yes</td>
<td>1</td>
</tr>
<tr>
<td>Suze</td>
<td>6</td>
<td>0</td>
<td>no</td>
<td>0</td>
</tr>
<tr>
<td>Coral</td>
<td>7</td>
<td>10 or more</td>
<td>no</td>
<td>less than 10</td>
</tr>
<tr>
<td>Kate</td>
<td>8</td>
<td>10 or more</td>
<td>yes</td>
<td>more than 10</td>
</tr>
<tr>
<td>Toni</td>
<td>9</td>
<td>15 or more</td>
<td>no</td>
<td>0</td>
</tr>
<tr>
<td>Karen</td>
<td>10</td>
<td>10 or more</td>
<td>no</td>
<td>less than 10</td>
</tr>
</tbody>
</table>

*Note.* Jacqui, Maree, Penny and Toni are the four teachers whose data features in the structured narrative reporting.
Appendix B

Consent to use child data

FOR PARENTS / GUARDIANS TO SIGN ON BEHALF ON THEIR CHILDREN.

This form certifies that, I,
(Print your name as parent / guardian) ______________________________________________

have been fully informed about this project and I understand the meaning and demands of
participation as a ‘focus child’.

I give permission for my child, ______________________________________________ (child’s name)
to be a ‘focus child’ in this LANGUAGE DEVELOPMENT PROJECT conducted by
Carmel Bochenek from the University of Notre Dame Australia, at __________ Primary
School Busselton; for the years 2000-2001.

Upon signing this form, I agree to the use of my child’s research records for professional
purposes. I understand that the project may be presented to audiences of teachers and
other professionals. Although the project is scheduled for formal completion in 2001/2,
the use of research data is not end-dated.

I also understand that ‘focus child’ data may include: (Please tick those you agree to.)

• Case study as a ‘focus’ child. ____

• Oral & written language sampling as needed. ____

• Access to school and specialist records, as needed. ____

• Confidential discussion with other personnel. ____

• Collection of school work samples. ____

• The trial of language support strategies. ____

• The use of audio / videotape of the child within professional presentations. ____

• The use of pre-existing professional records re this child. ____

• The use of the child’s records in professional reports, theses, publications,
presentations and clinical work. Records will be coded for anonymity and
presented confidentially at all times, without identifying data. ____

WITHDRAWAL OPTION.

I understand that at any time, I may choose to withdraw my consent for further
involvement by my child. Use of existing research records for my child will be
renegotiated at that time.

DATA ACCESS.

Original research data will remain as the personal and intellectual property of the
researcher. Data will be stored with attention to maintaining confidentiality and
limiting access to the researcher, supervising University staff and approved audiences
(as above). These conditions will be maintained after formal completion of the project.

PARTICIPANT INFORMATION.

Project participants will be kept informed of the progress and outcomes of the
LANGUAGE DEVELOPMENT PROJECT in three ways.

i) Via regular written summaries to the school community.

ii) During participant interaction with the researcher.

iii) Via direct contact with the researcher as necessary.

Your signature _____________________________ Date ___________

Researcher's signature ______________________ Date ___________

With thanks, Carmel Bochenek.
Appendix C

Consent to use adult data

TEACHERS / EDUCATIONAL ASSISTANTS / PARENTS / GUARDIANS AS PARTICIPANTS.
This form certifies that, I, (Print your name as Teacher / Educational Assistant / Parent / Guardian)

agree to be involved in the LANGUAGE DEVELOPMENT PROJECT conducted by
Carmel Bochenek from the University of Notre Dame Australia, at ____________
Primary School Busselton, for the years 2000-2001.
Upon signing this form, I agree to the use of my research records for professional
purposes.
I understand that the project will be described under various titles, to suit the audience
and purpose of presentation. Although the project is scheduled for formal completion in
2001/2, the use of research data is not end-dated.

I understand that my involvement may relate to: (Please tick those you agree to.)

- Case studies of ‘focus’ children. 
- Oral & written language sampling.
- School and specialist records, as needed.
- Discussion with other personnel.
- School work samples.
- The trial of language support strategies.
- The use of audio / videotape / photos of me for professional presentations.
- The use of specified pre-existing professional records.
- The use of research data in professional reports, theses, publications,
presentations and clinical work. Records will be coded for anonymity and
presented confidentially at all times, without intent to identify individual
participants.

WITHDRAWAL OPTION.
I understand that at any time, I may choose to withdraw my consent for further
involvement. Use of my existing research records will be renegotiated at that time.

DATA ACCESS.
Original research data will remain as the personal and intellectual property of the
researcher. Data will be stored with attention to maintaining confidentiality and
limiting access to the researcher, supervising University staff and approved audiences
(as above). These conditions will be maintained after formal completion of the project.

PARTICIPANT INFORMATION.
Project participants will be kept informed of the progress and outcomes of the
LANGUAGE DEVELOPMENT PROJECT in three ways.
iv) Via regular written summaries to the school community.
v) During participant interaction with the researcher.
vi) Via direct contact with the researcher as necessary.

Your signature ___________________________ Date ___________
Researcher’s signature ______________________ Date ___________
With thanks, Carmel Bochenek.
Appendix D

Example of the content and format of the Oral and Written Language Database
Term One - OWLD1

LANGUAGE DEVELOPMENT PROJECT


DATA GROUP: 1 2 3

CONFIDENTIAL

CHILD’S NAME: LDP CODE:

YEAR LEVEL: TEACHER/S:

PARENT/S:

GENERAL INFORMATION.
• The 20 point database will be referred to as the Oral and Written Language Database or OWLD.
• It was compiled for each focus child during Term 1 (2000) of the Language Development Project.
• Please note the combination of classroom based descriptive data and formal assessments used.
  The Clinical Evaluation of Language Fundamentals Preschool CELF-P (1992) was used to
  formally assess the oral language levels of each focus child this term.
• The OWLD will be used for programming the Language Development Project (LDP) during
  Term 2. As further strategies are tried and the database updated, this summary will be amended.
Parents and teaching staff will receive another summary next term.
• Comments have been added to this summary to personalise the OWLD for this child.
• Areas for LDP planning are indicated with an *

PLEASE CONTACT ME IF YOU WISH TO DISCUSS THIS SUMMARY.

DATABASE
1. Child case history, completed by ...
   Significant information includes…
2. Speech sound samples (Phonology)
   Taken from classroom interactions and individual assessment sessions.
   Examples of this child’s speech sound patterns follow…. These patterns seemed to be consistent / inconsistent / more frequent in sentences than words.
   Formal assessment is / is not recommended for Term 2.
3. Vocabulary (using and understanding words.)
   Noted during spontaneous conversation.
   Formally assessed with the Formulating Labels subtest of the CELF-P.
   Examples of items not named appropriately follow…
4. Comprehension of words, sentences, stories and directions (Semantics.)
   Observed in the classroom.
   Formally assessed with the Linguistic Concepts, Basic Concepts and Sentence Structure subtests of the CELF-P.
   Examples of items that this child misunderstood, follow…
5. Word building, grammatical changes to words in sentences (Morphology.)
   Noted during spontaneous conversation.
   Formally assessed with the Word Structure and Recalling Words in Sentences subtests of the CELF-P.
   Examples of errors made by this child:
6. Grammar & word order for sentences (Syntax.)
   Noted during spontaneous conversation.
   Formally assessed with the Recalling Words in Sentences subtest of the CELF-P.
   Examples of sentences used by this child:
7. Conversational skills eg. staying on topic, turn-taking. (Pragmatics / discourse.)
   Observed.
   Sampled.
8. Oral text retelling (Narrative.)
   Sampled with the *Recalling Words in Sentences* subtest of the *CELF-P*.
   Noted during classroom tasks.
   Sampled with oral and written language play.
9. Organizing and processing spoken information. (Auditory processing.)
   Observed during classroom tasks.
   Noted using the *CELF Behavioural Observation Checklist*.
   This child displayed signs of difficulty…
10. Awareness of sounds, words, sentences and longer text.
    (Phonological & Metalinguistic awareness.)
    Noted during classroom tasks.
    Sampled with oral and written language play.
    This child was noted to….
11. Task awareness / understanding what to do and reflecting on the steps involved.
    (Metacognition )
    Observed during classroom tasks.
    Probed during formal assessments.
12. Familiarity with books, writing conventions (Concepts of print.)
    Observed.
    Sampled.
13. Reading samples.
    Observing errors & strategies used in Years 1-2.
    Observing “role-play” reading in K-P.
14. Writing samples.
    Discussed with Year 1s & 2s.
    Encouraged in K-P.
15. Spelling samples.
    From Portfolios (Years 1 & 2) and spontaneous samples. (K-2)
16. Use of punctuation and language genre (Print conventions.)
    From Portfolios in Years 1 & 2.
17. Editing of written work.
    Sampled during whole class sessions (Year 2).
    To be sampled further (Years 1 & 2).
18. How does this child use language to learn? (Language for learning.)
    Group observation.
    1:1 sampling.
19. Classroom participation.
    Anecdotal records related to concentration, attention, and participation.
    Observation of the amount of teacher direction required by this child.
20. Teacher / parent / specialist concerns:
    Interview data.
    Anecdotal records.
    Previous school / specialist reports, referral information.
    From *Literacy Net* class profiling (P-2) or whole class testing (Year 2.).

**SUMMARY COMMENTS FOR THIS FOCUS CHILD IN THE LDP.** *(Condensed)*

1. The main areas of concern have been indicated with an * above.
2. Other comments...
3. Dates and times for teacher feedback and planning sessions.

C. Bochenek 1/00
Appendix E

Language Development Project. Term 2, 2000
Summary of sessions: Year 1 groups

1. **IN-CLASS SESSIONS. Explicit teaching/learning experiences included:**

1.1. **SOUND-WORD RELATIONS.**

- Clapping syllables to segment words into sound chunks eg. 1 ‘clap’ words eg. horse; 2 or more ‘clap’ words eg. don-key.
- Talking about new vocabulary eg. farm, zoo, pet topics. Identifying ‘tricky’ words, long words, small words inside bigger words eg. key in don-key, words that sound like other words eg. Troll-roll (from The Three Billy goats Gruff.)
- Showing how 1 sound can change word meaning eg. ‘mouse’ v’s ‘mice’.
- Using first sounds or the first syllable in words to remember them eg. ‘har _ _ for har-yes-ter.’
- Noticing and explaining rhyming words whenever possible eg. pig, wig, dig, jig.
- Working in groups to think of rhyming words. Real and nonsense rhyming words were accepted but we talked about whether each word was ‘real’ or not. eg. pen, hen jen, ten. We talk about ‘hearing’ the rhyme at the end of the words and that the words may not LOOK the same but they ‘sound the same at the end.’
- Listening to words stretched out to guess the real word eg. G-o-l-d-i-l-o-c-k-s.
- Encouraging the children to stretch words out so that we can hear every sound. Some children can do this with short words but ‘chunk’ sounds together in longer words. Eg. an-i.-m-a-l / a-n-i.-m-a-l.
- I model words stretched into sounds for the children to identify and copy. Parents have been encouraged to do this to help children ‘hear’ the sounds they need to write.
- During writing, I tick each sound that the child has represented with a letter (or letters.) We say the words slowly to hear any extra sounds and add them in.
- We talk about letter choices (as in THRASS) or ‘rules’ if appropriate. The focus is on writing what we can hear and being aware of ‘look and say’ words at this stage.

1.2. **SPEECH SOUNDS.**

- All words are modelled correctly and discussed when speech errors occur. All the children in the group practise sound postures and sound contrasts in words. We talk about the target sound for the word and speech strategies such as slowing down, breaking the word into parts, looking at the letters to remember the speech sound etc.
- Particular speech sounds are rehearsed in words, explained and cued using mouth and hand cues. The most common speech sounds for attention in year one have been:
  - /s/ words: teeth closed like a gate, keep your tongue inside, letters s and z.
  - /r/ words: lips forward and curly for a long /rrr/, letter r (at the beginning of words).
  - /th/: poke your tongue out. Catch it with your teeth, letters ‘th’ together.
  - /f/: show your teeth on your bottom lip and blow softly, letters f, ff or ph.
  - /l/: tongue up for /l/, letter l.
  - /sh/: lips forward onto our finger, like the ‘quiet’ noise, letters ‘sh’ together.
  - /ch/: tongue forward quickly, like /t/ + /sh/. Letters ‘ch’ or ‘tch’.
/j/: it sounds like /ch/ but feels ‘harder and louder’ in the mouth. Letters ‘j’ or ‘ge’

Consonant blend words (have 2 or more consonants before the vowel, making them ‘tricky’ to say.) Some children need to say the sounds separately and slowly like, s.q-u. a.re, p.lease, t.r. actor, c.r. ocodile.

Visual cues for speech sounds include: eg. pointing to my teeth out for /l/, showing the long sound /s/, moving my finger forward for /th/ between the teeth.

I have written the sounds we need to change in words for the children to see as well as hear the differences. eg. /th/ for /l/ in thirsty.

1.3. LISTENING SKILLS.

- Listening for your name, for your turn.
- Listening with your eyes (looking at the speaker), your ears (noticing my voice), listening with your hands (keeping them still), listening with your mouth (lips closed.)
- Combining strategies to help the children ‘listen’ to clues. Eg. ‘It starts with a /b/, it’s something you can eat, it might feel soft or squishy… It’s /b/ for … banana.’
- The children are to listen to ALL the clues before guessing a word. They try to recall the clues to match their choice.
- Checking that children have understood tasks by asking them to ‘teach’ someone else.
- Modelling group listening skills eg. “Sam is speaking now. Miss ----- is asking us to listen now.” Asking some children to ‘show the others’ how we listen.
- Encouraging children to listen to and monitor each other’s speech eg. ‘Look for someone who is listening well, to have the next turn’ (in small group work.)
- ‘Check that everyone is listening before you start’ in whole class work such as news sharing. Commenting on appropriate listening behaviours.
- Being aware that children’s hearing can fluctuate and that classroom noise, activity levels and visual distractions can influence ‘attention’.
- Being aware that some children need to have instructions simplified, repeated, rephrased or presented slowly… to assist their understanding.
- Encouraging children to repeat information to others to ‘sort it out’ eg. ‘We have to think of what we would like to eat on bread.’
- I plan ‘listening breaks’ after demanding sessions because listening can be very tiring.

1.4. LANGUAGE PLANNING.

- Modelling and encouraging whole sentence use as appropriate eg. When answering questions… “I think it could be…”
- Using vocabulary choices to predict words in books eg. When talking about the Three Little Pigs… ‘Shall we say call him the Big Bad Wolf or the Wicked Wolf?’
- Comparing our own ideas with story language to make vocabulary and word order choices.
- Recalling whole sentences to notice the word order and pattern used. Eg. ‘The Big Bad Wolf always said: I’ll huff and I’ll puff and I’ll blow your house down.’
- Checking punctuation to decide how to ‘read’ stories together eg. ! tells me to use an excited voice, a “Wow!” voice. (I model alternative ways to say read sentences for the children to choose the ‘best’ one.)
- Eliciting correct grammar eg. Do we say “I buyed it, or I bought it?”
- Having a real purpose for using speech, language and listening to participate in group tasks eg. Let’s choose a different animal to add to the story…we’ve already got a dog, a cat, a pig, a duck …
- Using clues to help others guess who/what we are thinking about eg. I describe one farm animal from three pictured.
- Telling repetitive stories to encourage oral language role-play eg. “I’m going for a walk on the farm. First I’ll walk past the fence, over the bridge, through the gate…”
- We count the words in stories the children create orally, by looking and listening, eg. ‘I would like to have a pet turtle.’ I repeat the sentence, spacing the words for the children to ‘hear’ and putting one finger up for each word.
- Encouraging children to ‘use their words’ to ask for help, explain a problem, solve a problem etc.
- Sharing ideas as a small group before we write individual texts.
- Talking about similarities and differences between shared ideas eg. ‘We’ve all thought of something to ask the zookeeper. Joe’s asking about the pandas and Nicholas is asking about the snakes.’
- Talking about the children as ‘readers’, ‘writers’, ‘poets’ eg. “These year 1 poets are going to share the poems they’ve written.”

1.5. WRITTEN LANGUAGE.
- Guessing words to complete sentences when sharing familiar and unfamiliar books.
- Writing or finding words in books that the children have used in language planning.
- Reading together in small groups… to notice and discuss how others try words.
- Reading individually to rehearse strategies.
- Encouraging draft ‘writing’ as part of oral language games.
- LOOKING at letters, LISTENING to sounds, and clapping words we use.
- Modelling written tasks eg. letters, invitations, poems. Talking about the features of that language form.
- Writing, reading and explaining our ideas to each other. Sharing finished work with an audience.
- Beginning to give ‘audience comments’ to other readers so they know what is good about their work eg. ‘I liked the bit about Zug hugging the slug.’
- Modelling and discussing reading strategies eg. “I looked at the C, listened to the word camp-ing and thought: That sounds O.K. We went camping by the river.”
- Modelling and explaining the concepts of written language eg. sentence, word, letter, sound. Counting each of these features in shared text eg. “How many words are in the title: Fruit Salad?” “How many letters are in the title?” etc
- Using counters to model sounds within words eg. This word, ‘jumped’, has five sounds ie. j-u-m-p-ed. Encouraging the children to move a counter for each sound. They are better at doing this with me at the moment. Most of the children can separate all of the sounds in short words but ‘chunk’ sounds together in longer ones.
- Telling the children the sounds I can hear, that they have written eg. Sindrla. Saying extra sounds slowly and showing them the extra letters needed eg. Sinder-ella. Telling the children about letters we can’t hear & alternative letters for sounds eg. Cinderella.
Talking about words we ‘Look at and say’ eg. was; & words to sound out eg. w-i-th.
Discussing errors positively eg. Jolly Postman starts with ‘J’ but it does sound like ‘G’ in ‘Giant’. It's great that you knew to change G into J.
Praising children who notice patterns in written models eg. ‘ow is like ou.’
Building a positive self-concept for each child as I talk to them eg. “You read… You wrote… You said… You helped me… You told me about… You listened to.”
Reminding children about correct pencil grip, letter formation and writing posture.

2. **PARENT SESSIONS.** An overview of the LDP was presented to K-2 parents of focus children in week 2 of term.
   - A summary of Year 1 strategies was distributed in week 3.
   - Year 1 parents of focus children have not had regular meetings during term 2 but have participated in class sessions and discussed teaching and learning strategies then.
   - Other K-2 parent groups have met on a regular basis to discuss the LDP strategies, strengths and needs of individual children, and ideas for home follow-up.

3. **OUTCOMES.**
   - The focus children are all participating enthusiastically in regular LDP sessions.
   - Other children show interest in the LDP activities and participate as ‘visitors’.
   - The children show awareness of LDP strategies, using them during our sessions.
   - Parents have reported specific learning as demonstrated by their children eg. “how to make certain sounds, how to clap sounds in words.”
   - Parent feedback suggests that it is more useful to participate in the classroom sessions than to just hear or read about the strategies used. Several parents have initiated discussion specific to individual children. This seems to be valuable.
   - Parents in other groups seem to value parent-to-parent sharing also.
   - **I suggest that a Year 1 parent group be tried during term 3, starting on Tuesday 18/7/00 at 2.45pm, in the school Library.**
   - The Year 1 Teachers and Teacher Assistants have supported the LDP throughout the term. They have discussed the activities as necessary and shared their observations about the children.
   - Room 14 have had small group and whole class sessions. Room 15 have continued with small group sessions.

**FOR TERM 3:**
- All Year 1 focus children will remain in the LDP for term 3. Additional focus children will join the program in both classes.
- Both Year 1 classes will try one ‘whole class’ session per week and one session of small group work with focus children. This is to enable the classroom teachers, EA’s and myself to work together on LDP strategies, where they apply to all the students. It will also facilitate joint planning, assessment and review as necessary.
- Parent participation in the classrooms is encouraged for term 3. At this stage, LDP times are:
  (Timetable added).
- Outcomes and needs will be reviewed for term 4 planning.

THANK YOU FOR YOUR PARTICIPATION & SUPPORT FOR THE LDP.
I LOOK FORWARD TO WORKING TOGETHER DURING TERMS 3-4.

Please contact me if you wish to discuss the LDP or your child further. Carmel Bochenek (contact details given).
Appendix F

**Individual interview proforma for participant teachers**
(initial & final interviews)

**TEACHER:**

**CODE:**

**SCHOOL:**

**CODE:**

**CLASS YEAR LEVEL:**

**INTERVIEWER:**

**DATE OF INTERVIEW:**

**TIME BEGANN:**

**TIME COMPLETED:**

**VENUE:**

**TAPE REFERENCE:**

**OTHERS PRESENT:**

**OTHER FACTORS:**

**PURPOSE OF INTERVIEW:** tick the relevant description/s (re initial or final interview).

To explore the teacher’s understanding of children at ‘educational risk’, specifically:

i) The oral and written language strengths and needs of focus children, prior to the creation of an OWLD for each child.

ii) The oral and written language strengths and needs of focus children, after sharing the OWLD for each child with this teacher.

To explore the teacher’s language support programming after sharing the OWLD for each focus child. Specifically:

iii) The SELECTION of oral and written language support strategies for focus children.

iv) The IMPLEMENTATION of oral and written language support strategies for focus children.

Other:

**NUMBER OF FOCUS CHILDREN:**

**CODE/S:**

(See attached class list for information specific to individual children.)

---

**EDUCATIONAL RISK**

1. Thank you for completing the details of focus children in your class. It’s important that I understand your view of ‘educational risk’. How do you explain ‘educational risk’?

2. Do you think this notion of ‘educational risk’ applies to each of the focus children? Why/why not?

3. What do you notice about each of the focus children in your classroom?

4. Tell me about anything that you’ve noticed each focus child do easily/well?

5. Tell me about current class activities that you believe focus children would have difficulty completing?

6. Tell me about the educational outcomes you predict for each focus child for this year?

7. Tell me about factors that you think might hinder each focus child’s educational progress this year?

8. How would you discuss each child’s current ‘progress’ with his/her parents?
LANGUAGE PROGRAMMING

9. Do you use specific strategies to strengthen each focus child’s oral or written language? Could you give details or examples?

10. Tell me about strategies you use with any focus child, that you believe are particularly effective in strengthening oral and written language?

11. Are there things that would help you to meet each focus child’s oral and / or written language needs?

12. Do you think any other people could support your language program for the focus child? WHO and HOW?

13. What would help the parents of each focus child to address that child’s oral and / or written language needs?

14. In what ways might Educational Assistants (EA) help to meet the oral and written language needs of focus children? Do you have any examples?

15. What information or assistance would your EA need to help her/him to meet the language needs of focus children?

16. What is your opinion of language support programs for children at ‘educational risk’? What is / isn’t useful?

END OF INITIAL INTERVIEW

THE ORAL AND WRITTEN LANGUAGE DATABASE (OWLD)
(End of Term One or early Term 2 discussion.)

17. We have discussed the assessment data that I have used to create the OWLD for the focus children. Do the ‘profiles’ of the children seem accurate to you?

18. How does each profile match your perception of that focus child?

19. Is there anything here that doesn’t match your perceptions of the focus children?

20. In what ways could this information help teachers / educational assistants / parents?

21. What ideas do you have for presenting this information to other teachers?

22. In what ways could this information enhance understanding of children’s language strengths and needs?

23. In what ways could this information assist the SELECTION of language support strategies for focus children?
24. In what ways could this information assist the IMPLEMENTATION of language support strategies for focus children?

25. To what extent could this information help teachers manage whole classes?

THE OWLD AND LANGUAGE SUPPORT PROGRAMMING
(These issues were discussed at various review & planning times during the year.)

26. I have used the OWLD to select / plan / suggest / implement language support strategies for focus children. Do you think such a database is NECESSARY as a basis for language support planning? Why or why not?

27. What do you think are the pros and cons of using a database such as the OWLD for language support programming?

28. Can you suggest alternative ways to program for children at ‘educational risk’?

29. In your experience, do you think ECE classroom teachers do program for each child’s language strengths and needs? Why or why not?

30. From your experience, how could other teachers be encouraged & supported to plan for each child’s language strengths and needs?

31. If teachers were to include personalised language goals in whole class programs, what would assist them to do so?

32. Having had the opportunity to use this OWLD, which features of it (if any) do you think could help teachers to plan outcomes focused language support programs?

33. Do you have any other comments about ways to improve language support programs for children at ‘educational risk’ in ECE?

34. Do you have any other general comments about the Language Development Program, so far?

Thank you for your time and interest. Your comments will be coded and written up anonymously.
Carmel Bochenek. 15/2/2000.
Appendix G

Example of OWLD1 completed for focus child CPOR

LANGUAGE DEVELOPMENT PROJECT.  SCHOOL NAME
DATA GROUP: 1

CONFIDENTIAL

CHILD’S NAME: deleted  LDP CODE: CPOR
YEAR LEVEL:  P/P  TEACHER/S: TPS
Educational Assistant: EA  PARENT/S: Name of Mother & Father deleted

GENERAL INFORMATION.
 The 20 point Database will be referred to as the Oral and Written Language Database or OWLD.
 It was compiled for each focus child during term 1 (2000) of the Language Development Project
 Please note the combination of classroom based descriptive data and formal assessments used.
  The Clinical Evaluation of Language Fundamentals Preschool-CELF-P (1992) was used to formally assess the oral language levels of each focus child this term.
 The OWLD will be used for programming the Language Development Project (LDP) during term 2. As further strategies are tried and the database updated, this summary will be amended. Parents and teaching staff will receive another summary next term.
 Comments have been added to this summary to personalise the OWLD for this child.
 Areas for LDP planning are indicated with an *

PLEASE CONTACT ME IF YOU WISH TO DISCUSS THIS SUMMARY.

DATABASE

1. Child case history, completed by Father and Mother. *
    CPOR is in his second year of Pre-primary. He has a late birthday (7/12/94) and his 1999 teacher suggested that he was ‘struggling’ with his Pre-primary placement. Mother expressed some concerns about CPOR’s ability to hear and listen. She also noted his confusion about how to say some words.
    CPOR was assessed by an Occupational Therapist in Dec. ’99 and reported to have a mild delay with visual motor integration.
2. Speech sound samples (Phonology)
    Examples of this child’s speech sound patterns follow. Some n/m, d or f/th, d/t confusion; plano/piano, ‘a glow ball’ for ‘a globe’, ‘He’s coving (covering) a present’.
    These patterns suggest some difficulty with auditory / speech processing.
3. Vocabulary (using and understanding words.)
    During formal assessment (with the Formulating Labels subtest of the CELF-P) CPOR had some difficulty labeling pictures eg. He said jetty/bridge, knitting /sewing, party/parade.
    Later he asked “What does large mean?” and confused top/bottom. Mother has noted CPOR’s confusion with concept words such as “front” (door) at home.
4. Comprehension of words, sentences, stories and directions (Semantics.) *
    The Linguistic Concepts, Basic Concepts and Sentence Structure subtests of the CELF-P showed that CPOR misunderstood some standard instructions. He
requested clarification of test items on several occasions eg. ‘What did you say again?’

- Sometimes CPOR seemed unsure whether I had spoken or not. He watched me carefully during the assessments and needed prompts to help him focus on the language tasks.

5. Word building, grammatical changes to words in sentences (Morphology.) *

- Spontaneous conversation & formal assessment (with the Word Structure and Recalling Words in Sentences subtests of the CELF-P) provided examples of CPOR’s errors. Eg. “She’s bike…. Girl/girl’s.”

6. Grammar & word order for sentences (Syntax.) *

- Spontaneous conversation & formal assessment provided examples of CPOR’s difficulty with sentence planning. eg. “Mum will said, the moving. If you have a big sleep the moving van will come. Her can move too. That she said, I just look like Mum with this”

7. Conversational skills eg. staying on topic, turn-taking, (Pragmatics / discourse.)

- CPOR was keen to introduce his topics but needed some prompts to stay “on topic” appropriately.

8. Oral text retelling (Narrative.)

- Sampled with the Recalling Words in Sentences subtest of the CELF-P. CPOR enjoyed the story-sharing task.
- He was keen to participate in story tasks. He told one about himself falling out of a window.

9. Organizing and processing spoken information. (Auditory processing.) *

- Observed during classroom tasks & using the CELF-P Behavioural Observation Checklist.
- CPOR displayed significant difficulty processing spoken language, especially in noise.
- Formal assessment of CPOR’s auditory processing is recommended.

10. Awareness of sounds, words, sentences and longer text. (Phonological & Metalinguistic awareness.) *

- Formal assessment of CPOR’s speech sound (phonological) processing is recommended.
- He did not demonstrate awareness of his speech/language errors today eg. Kim/ him.

11. Task awareness / understanding what to do and reflecting on the steps involved. (Metacognition )

- CPOR used facial expressions and questions to effectively clarify task expectations.

12. Familiarity with books, writing conventions (Concepts of print.)

- CPOR is reported to be more interested in books and writing activities this year.

DATABASE ITEMS 13-17 ARE NOT APPROPRIATE IN TERM 1.

13. Reading samples.
14. Writing samples.
15. Spelling samples.
16. Use of punctuation and language genre (Print conventions.)
17. Editing of written work.
18. How does this child use language to learn? (Language for learning.)

- CPOR is aware of his confusion with some language tasks and seeks help. He benefits from adult support to complete some class activities.
19. Classroom participation.
   - CPOR’s teacher noted his reduced participation in class discussion and that he needs some help to maintain concentration during mat sessions.
20. Teacher / parent / specialist concerns:
   - Interview data: Parents and teachers are aware of CPOR’s difficulties in Pre-primary during 1999.
   - CPOR has not had previous Speech – Language – Hearing assessments.
   - Literacy Net class profiling (P-2) prompted CPOR’s LDP inclusion.
   - CPOR’s parents and teachers support his inclusion in the LDP.

SUMMARY COMMENTS FOR THIS FOCUS CHILD IN THE LDP.
1. The main areas of concern have been indicated with an * above.
2. CPOR presented as a child who mouth breathes and may have fluctuating hearing levels. He seemed to concentrate more easily in a quiet v’s noisy classroom. An audiological assessment is recommended.
3. Although CPOR’s speech is usually clear enough to be understood, he shows signs of difficulty with auditory / speech processing. His sentence forms and grammatical patterns are “below the expected range for age”.
4. Despite seeming to enjoy the data collection sessions, CPOR had difficulty with some standard instructions and needed additional support. His language scores for comprehension & production tasks were “below the expected range for age.”
5. Further auditory/ speech processing assessment is planned during the LDP.
6. CPOR’s total language score was “below the average range for his age”. His significantly low score for ‘word structure’ also suggests he is “at risk for language-learning difficulties”.
7. My recommendation is that CPOR’s specific language needs are identified and supported through the LDP during 2000.
8. His LDP project time will focus on specific oral and written language strategies in the areas shown *.

Language strengths
- CPOR’s language strengths are:
  - His enjoyment of 1-1 language interaction eg. the story-sharing task.
  - His recent interest in books and writing activities.
  - His ability to talk about his own experiences. Eg. His story about falling out of a window.
  - His use of language to clarify meaning eg. “What did you say again?”

PLEASE NOTE:

This data is specific to CPOR.
He has been placed in language data group 1 for LDP planning purposes.
The next LDP parent meeting will be on Thurs afternoon 4/5/00.
Time and venue will be advised in the school newsletter.

Carmel Bochenek 4/00
AN OVERVIEW OF DATA COLLECTED FOR LDP FOCUS CHILDREN
(As attached to OWLD1 for all teachers and parents.)

Three data groups were identified according to children’s oral and written language characteristics and possible “educational risk”. All of the LDP focus children are considered to have some form of “specific speech-language impairment”.

GROUP 1. CHILDREN WITH GENERAL LANGUAGE WEAKNESS

Difficulty with language comprehension AND speech / language production. These children are “at educational risk” because language is the main tool of teaching and learning. If the learning tools aren’t ‘working well’ it’s difficult to progress with the job!

GROUP 2. CHILDREN WITH A SKEWED LANGUAGE PROFILE

These children have developed adequate language comprehension levels but have significant difficulties with speech/language production. Difficulty with language planning &/or phonological processing can impact on literacy outcomes. Therefore these children present with some “educational risk”.

GROUP 3. CHILDREN WITH LANGUAGE TEST SCORES “WITHIN THE RANGE FOR AGE”

These children demonstrated very specific features of oral or written language impairment. For example, data for one child showed early middle-ear problems, compromised listening development, significantly reduced speech clarity (probably due to phonological processing difficulty) and difficulty with early drawing / written language tasks. Although “bright”, this child has particular difficulty learning language.

Such children are “at educational risk” because their strengths and needs take sometime and expertise to identify. In Kindy and Pre-primary such children may be viewed as “developmentally immature” rather than “at educational risk of language-learning difficulty”. As they progress to years 1&2, such children are noticed as “strugglers” or those “failing to meet literacy benchmarks”. They can be easily “missed” because their strengths may disguise their needs. For example, they may exhibit specific difficulties with spelling rather than reading, and may not contribute confidently in whole group oral language tasks. These children often “pass” standardized language tests but their teachers express concerns about their classroom performance.

These children may have “learnt to talk” but may not use “talk to learn”. They may need additional explicit teaching in some, but not all speech / language areas and may need to be made aware of specific strategies for oral and written language tasks.

NOTE: Children in all data groups showed VERY SPECIFIC STRENGTHS / NEEDS in some of the 20 language areas sampled. Individual profiles will be considered when planning language outcomes. Teacher feedback and planning sessions will be scheduled as necessary.

Carmel Bochenek 4/00
Appendix H

Example of OWLD2 completed for focus child CPOR

<table>
<thead>
<tr>
<th>LANGUAGE DEVELOPMENT PROJECT.</th>
<th>SCHOOL NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHILD DATA SUMMARY.</td>
<td>TERM 2, 2000.</td>
</tr>
<tr>
<td>AUDIOMETRIC DATA GROUP: 2</td>
<td></td>
</tr>
</tbody>
</table>

CONFIDENTIAL

CHILD'S NAME: deleted  LDP CODE: CPOR
YEAR LEVEL: P/P  TEACHER/S: TPS
Educational Assistant: EA
PARENT/S: Name of Mother & Father deleted

GENERAL INFORMATION

This is a summary of the Oral and Written Language Database (OWLD2) collected during term 2. Additional data is based on: Classroom observation & interaction.

- Work samples and Portfolios (if applicable).
- Speech & language sampling.
- Parent, Teacher and Educational Assistant feedback.
- Parent meeting issues / phone contact.
- LDP sessions.
- Audiometric assessment.

It is the basis for Language Development Project (LDP) planning during term 3.

PLEASE CONTACT ME IF YOU WISH TO DISCUSS THIS SUMMARY.

DATABASE (LDP Information relates to 20 oral & written language areas.)

Samples have been updated for all children throughout the term.

*1. Early development /Child case history. Plus an Audiometric profile this term.
2. Speech sound samples (Phonology.)
*3. Vocabulary sample (use and understanding of words as labels.)
*4. Comprehension of words, sentences, stories and directions (Semantics.)
*5. Word building, grammatical changes in sentences (Morphology.) eg. fell not failed.
*6. Grammar & word order in sentences (Syntax.)
7. Conversational skills eg. staying on topic, turn-taking, (Pragmatics / discourse.)
8. Oral text creation and retelling (Narrative.)
*9. Organizing and processing spoken information. (Auditory processing.)
*10. Awareness of sounds, words, sentences and longer text.
   (Phonological & Metalinguistic awareness.)
*11. Task awareness, understanding / reflecting on the steps involved.
   (Metacognition.)
12. Familiarity with books, writing conventions (Concepts of print.)
13. Reading samples.
14. Writing samples.
15. Spelling samples.
16. Use of punctuation and language genre (Print conventions.)
17. Editing of written work.
18. The child’s use of language to learn (Asking questions, clarifying, looking & listening for clues etc.)
19. Classroom participation. (Group and individual tasks.)

*20. Teacher / parent / specialist concerns.

Priority areas for LDP planning for this child, during term 2, are marked *.

TERM 2 UPDATE (OWLD2)

AUDIOMETRIC ASSESSMENT of CPOR between 1-6/6/00 involved three procedures.

- OTOSCOPY – a visual examination of the ear and ear drum.
- TYMPANOMETRY – an objective measure of middle-ear function. The tympanometer puts air against the eardrum to measure ear drum movement and middle ear status.
- AUDIOMETRY – samples the child’s hearing in each ear, across a range of sound frequencies required for speech. The aim is to record the softest sound that the child can hear, at various frequencies, in each ear.

These results were combined to suggest the following:

i) CPOR’s hearing levels were within the normal range on 2/6/00 with one low frequency result at the ‘borderline/normal level’ in the right ear.

ii) CPOR’s tympanometry results showed normal middle ear function in the right ear and suggest ‘eustachian tube dysfunction’ (as occurs with colds and allergies) in the left ear.

iii) CPOR usually attends well in the small group. He is aware of our listening behaviours. He has difficulty “listening” during whole sessions.

SUMMARY COMMENTS FOR CPOR IN THE LDP

1. During term 2, CPOR’s LDP sessions have been integrated with the whole class program. His parents have attended regular parent meetings. Details of the Term 2 program content and outcomes were given 27/6/00.

   Individually, CPOR has shown significant improvement in his:
   - Use of some segmentation strategies eg. clapping syllables, identifying first sounds.
   - Identification of letters & sounds using alphabet picture cards eg. letter s, /s/ -sun.
   - Awareness of speech sound positions eg. /th/ tongue out, d/t confusion has reduced.
   - Accurate word prediction, and rhyme awareness, during book sharing.
   - Accurate reading of names and simple repetitive phrases eg. “CPOR likes…”
   - Spontaneous role-play of reading & enjoyment of books.
   - Confidence with written language tasks eg. writing his name, his picture dictionary.

2. During Term 3, CPOR’s LDP sessions will include:
   - Continued attention to syllables, rhyme and letter-sound identification,
   - the use of letter forms as part of language games,
   - self-monitoring of sentence comprehension & grammar in stories, questions etc.
   - regular use of books and reading/writing ‘role play’.
The LDP program will be planned as an adjunct to the whole class program.

3. Additional recommendations include:
   - Continued parent contat. CPOR has responded very positively to home activities!
   - Making CPOR aware of his language strengths.

4. Further assessments recommended during the LDP are:
   - Phonological (speech sound) profiling (Vardi, 1991).
   - Phonological Abilities Test (Muter, Hulme & Snowling, 1997).
   - Test for Auditory Processing Disorders in Children-revised (SCAN.C) (Keith, 2000).
   - Others, as needed.

AN OVERVIEW OF AUDIOMETRIC DATA COLLECTED FOR LDP FOCUS CHILDREN

GROUP 1: Those with audiometric profiles of concern eg. hearing levels outside the expected range when sampled.

GROUP 2: Those with audiometric profiles that suggest hearing levels may fluctuate for this child.

GROUP 3: Those with audiometric profiles “within normal limits” when sampled.

PLEASE NOTE: 
CPOR remains in oral language data group 1. He is in audiometric data group 2 for LDP planning purposes.

Please note that children with ‘normal hearing’ can be poor listeners and exhibit concentration and attention difficulties. Children with compromised hearing may have developed adequate listening and concentration strategies.

Audiometric assessment this term provided objective data related to each child’s level of ‘educational risk’ for classroom learning. The SCAN.C test (Term 3) determines how well children can ‘process’ or ‘use’ what they hear. All children are likely to display variation in their listening skills, attention and concentration; related to the conditions in which they are listening AND personal factors such as fatigue, interest and learning style. It is this combination of objective ‘hearing’ assessment and apparent ‘listening’ effectiveness that I am interested in for the LDP.

CONCLUSION: 
Regardless of the data group (or level of ‘educational risk’) for each child, LDP data suggest that all of the focus children may require specific teaching strategies to match their individual learning strengths and needs. As well as supporting oral and written language development, the LDP aims to identify, rehearse, recommend and support strategies that encourage hearing and listening for learning. LDP data provide a rationale for language development programming. Data are used to match the strengths and needs of individual children to teaching strategies and planned learning outcomes. The LDP also aims to support teachers, EAs and parents involved. It is likely that ‘whole school’ outcomes will be identified during the project year. 

Carmel Bochenek 6/00 (Contact details given.)
Appendix I

Example of OWLD3 completed for focus child CPOR

LANGUAGE DEVELOPMENT PROJECT. SCHOOL NAME
CHILD DATA SUMMARY:OWLD3 TERM 3, 2000 25/9/00

CONFIDENTIAL

CHILD’S NAME: deleted LDP CODE: CPOR
YEAR LEVEL: P/P TEACHER/S: TPS
Educational Assistant: EA
PARENT/S: Name of Mother & Father deleted

CHILD DATA SUMMARY. (PROJECT USE ONLY.)
ORAL LANGUAGE DATA GROUP:
AUDIOMETRIC DATA GROUP:
PHONOLOGICAL PROFILE GROUP:
PHONOLOGICAL ABILITIES DATA GROUP:
AUDITORY PROCESSING DATA GROUP:
WRITTEN LANGUAGE DATA GROUP:
CLASSROOM SAMPLES DATA GROUP:

GENERAL INFORMATION. (PARENTS AND TEACHERS.)

1. What this report tells you.
1.1. The term 3 teaching points from your child’s language development program.
1.2. The discussion points shared by parent groups relevant to your child’s year level.
1.3. Any recommendations / changes negotiated with your child’s teacher/s this term.

2. How to use this report.
2.1. Refer to the SUMMARY COMMENTS section to read about your child:
   ▪ improvements this term,
   ▪ recommendations for further language support (if required).
2.2. Keep this report as a summary of your child’s language status in 2000. It may be useful as a basis for discussion about your child with future teachers or specialist service providers.
2.3. Add you own notes about your child as you notice improvements /new concerns.

3. What to do if you need to discuss this report further.
Please contact Carmel Bochenek on (contact details given.)

PLEASE REFER TO THE ATTACHED DOCUMENTATION.
SUMMARY COMMENTS ABOUT CPOR

1. IMPROVEMENTS THIS TERM
CPOR has shown:
  ▪ Improved attention & concentration during small group tasks.
  ▪ Increased use of oral language to clarify tasks or discuss small group activities.
  ▪ Enjoyment of book based activities such as story prediction.
  ▪ Enthusiasm for word-sound activities eg. guessing pictures / words from clues.
  ▪ A keen interest in letters and sounds.
  ▪ Improved letter formation eg. letter ‘e’.
  ▪ Enjoyment / accuracy with rhyme, first sound and nonsense word activities.
  ▪ Accurate selection of the correct grammatical form if he is given a choice after making a mistake eg. “I goed to Perth”… (You goed, or you went, to Perth?)
  ▪ Awareness of meaning errors during group discussions and spontaneous correction of his peers.
  ▪ Eagerness to discuss details of discussions he may not be sure about. I encourage all of the children to use their oral language to learn in this way.
  ▪ Enjoyment of all small group language tasks.

2. RECOMMENDATIONS FOR FURTHER LANGUAGE SUPPORT.
CPOR may benefit from support to:
  ▪ Further encourage role-play reading and writing.
  ▪ Begin to associate letter forms with mouth postures and speech sounds eg. /th/.
  ▪ Continue to copy speech sounds (f/th) & grammatical forms modelled to him.
  ▪ Monitor his own listening / concentration / attention behaviours.
  ▪ Begin to monitor his own speech / language errors and attempt to correct these.
  ▪ Become aware of his speech and language strengths.

3. ASSESSMENTS completed during Term 3, 2000 included:
Phonological Profile (Vardi, 1991),
*Literacy Net*, Semester 1, Pre-primary (Education Department of Western Australia, 1999). The Literacy Plan developed as a result will be forwarded soon.
Regular speech-language sampling,
Written language sampling, and
The Phonological Abilities Test (Muter et a., 1997).

4. YOUR ADDITIONAL COMMENTS about CPOR are noted for discussion at your next parent interview.
Please contact me before then if necessary.
Carmel Bochenek 9/00
Appendix J

Example of OWLD4 completed for focus child CPOR

LANGUAGE DEVELOPMENT PROJECT.

SCHOOL NAME

CHILD DATA SUMMARY: OWLD4 TERM 4, 2000 11/00

CONFIDENTIAL

CHILD’S NAME: deleted  LDP CODE: CPOR

YEAR LEVEL: P/P  TEACHER/S: TPS

Educational Assistant: EA

PARENT/S: Name of Mother & Father deleted

INITIAL DATA.
The following table simplifies the initial data gathered from formal assessment or sampling, for CYOR. For each main area of assessment the child’s level of educational risk is suggested. Please use this summary cautiously & discuss it with me or the classroom teacher as necessary.

DATA KEY:
1= high educational risk / overall weakness/ need for development in this area.
2= some educational risk / specific areas of need but specific strengths also.
3= low educational risk / “within the expected range for age”. Although very specific difficulties may have been identified, the overall result has not been significantly lowered.
4= no comment. (In some cases insufficient data were available to comment.)

NOTE: “1” suggests a higher priority for oral &/or written language management than “4”. A rating of 4 does not suggest a need for specific management in this area.

Table OWLD4.
SUMMARY OF EDUCATIONAL RISK / STRENGTHS & NEEDS.

<table>
<thead>
<tr>
<th>EDUCATIONAL RISK</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
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<tr>
<td>Oral language</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
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<td>Hearing</td>
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<tr>
<td>Auditory Proc.'g.</td>
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<tr>
<td>Speech</td>
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<tr>
<td>Sound Aware.</td>
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<tr>
<td>In.class Sem. 1</td>
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<tr>
<td>In.class Sem.2</td>
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<tr>
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<tr>
<td>Home Tasks</td>
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<tr>
<td>Self concept</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1 word structure is ‘weak’

“off topic” in the whole group

2= some educational risk / specific areas of need but specific strengths also.

3= low educational risk / “within the expected range for age”. Although very specific difficulties may have been identified, the overall result has not been significantly lowered.

4= no comment. (In some cases insufficient data were available to comment.)
CONCLUSIONS at mid-term4, 2000

1. CPOR has participated enthusiastically in the LDP, supported by his parents. They remain concerned about his need for language support services for classroom learning.
2. CPOR has shown significant improvement in his awareness of listening behaviours, his confident ‘play’ with words, letters and sounds, and his “role-play” reading and writing.
3. CPOR seems to benefit from small group work to frequently rehearse tasks, to receive confirmation that he is “right” and to address his confusions with word and sentence meanings, as they arise.

RECOMMENDATIONS for 2001
1. School based oral / written language support.
2. Close monitoring of classroom progress.
3. Specialist management of oral / written language development (at classroom teacher’s and parents’ discretion).
4. Language ‘focus’ child for 2001, especially re the monitoring of “meaning” from words, sentences, texts.

Carmel Bochenek 11/00
Appendix K

The changing focus of action research cycles during the Language Development Project 2000

Ten teachers and the researcher

Teacher focus:
- Getting to know new students,
- Requesting diagnostic information,
- Planning practical support for students at risk,
- Shaping practical support for students at risk,
- Considering teacher change,
- Reflecting on co-construction,
- Research outcomes.

Researcher focus:
- Participant observation,
- Understanding teachers' personal constructs,
- Developing the OWLD1,
- Facilitating co-construction,
- Collating additional student data,
- Eliciting the teachers' voice,
- Identifying influential factors & processes in co-construction.
- Research outcomes.

Action research cycle one
*School Term 1*
Oral & Written Language Data- OWLD

Action research cycle two
*School Term 2*
Planning & implementing changes to classroom practices

Action research cycle three
*School Term 3*
Further planning, action, observation & reflection

Action research cycle four
*School Term 4*
Participants' reflections & interpretations. Triangulation.
Appendix L

Presentations of this work in progress


Appendix M

Example of LDP planning: Year 1 listening tasks

LANGUAGE DEVELOPMENT PROJECT
YEAR 1 LISTENING PROGRAM OVERVIEW
TERM 3, 2000, as at 24/7/00.
CLASS: Room 14
TEACHER: T1P
TIMETABLE: Thursdays 8.50-9.30am.

LISTENING TASKS: WHOLE CLASS & SMALL GROUPS

1. GOALS
   - To build children’s awareness of the difference between hearing and listening.
   - To develop children’s awareness of the signs of ‘good listening’.
   - To encourage children to monitor their listening behaviour and improve it as necessary.
   - To direct children towards various types of listening behaviour. For example,
     General listening – choosing to focus on the speaker’s voice.
     Listening in noise – choosing to ignore background noise.
     Listening for a purpose – to find out the speaker’s intent.
     Listening for practice – to ‘get better’ at listening.
     Listening as part of group activities – to participate as expected.
   - To reinforce explicit listening behaviours.
   - To review listening achievements.
   - To reflect on WHAT, WHY, WHEN, WHERE & WHO we listen to.

2. OVERVIEW

WEEK 2. WHAT IS LISTENING?
Focus to the first 3 goals.
Talking about ears (briefly).
Looking for listeners… eyes, ears, hands, feet, tools, award points.
Listening times & listening breaks.
Good listeners in the whole group.
Good listeners in small groups.

WEEK 3. LISTENING PRACTICE.
Various types of listening.
Choosing to focus on the speaker… shared story telling.
Listening in noise… ignoring distractions.
Listening practice… clapping key words, listen and remember, listen and copy, listen and trick.
Group listening teams… games for points and rewards.

WEEK 4. REINFORCING & REVIEWING LISTENING BEHAVIOURS
Class listening models, listening scouts, listening recorders, listening helpers.
Self-evaluation… for portfolios. (Rubrics)
Listening posters.
WEEK 5. EVALUATION
Who needs what next?
Self-evaluation.
Role-plays.
Classroom: ‘good listening signs’.

3. STUDENT OUTCOME STATEMENTS
Proposed outcomes: from SPEAKING & LISTENING SL1-SL4 pg 8-9 English SOS. Specifically: Listening level 1. Pg 11, English SOS.
- In the classroom, chn ‘respond to simple questions, instructions, stories & statements.’
- ‘…use strategies to improve communication… their body language demonstrates active listening.’
- ‘They listen to speakers and contribute comments or questions.’
Listening level 2. Pg 12, English SOS.
- ‘consider ways in which speaking and listening change according to the demands of the situation.’
- ‘…take into account the purposes for speaking and listening … observe conventions of taking turns, asking questions & showing respect…’
Listening level 3. Pg 13, English SOS.
- ‘… follow information presented in group discussions… or, with help, from an audio or video text on a familiar topic.’
Listening level 4. Pg. 14, English SOS.
- ‘…in small group discussion they listen and respond constructively’
- ‘…they monitor and respond to strategies used by speakers to influence audiences’ (Volume, stress, rate of speech, special effects etc.)

Carmel Bochenek and T1P, 7/00

EXAMPLE OF DETAILED PLANNING

WEEK 2. WHAT IS LISTENING?

1. Talk briefly about ears, hearing and listening.
   - Text: Clare Has an Ear Infection. (Optional).

2. Looking for listeners.
   - Highlight good listeners with highlight stickers, positive comments.
   - Describe why they are good listeners: eyes, ears, hands, feet, tools.
   - Decide on point system for the morning… reward for class or individuals?

3. Listening times and listening breaks.
   - Listening time: Pet Whispers (variation on Chinese Whispers). Try a sample of 6 good listeners using a short sentence about a pet. The class observe. Those who listen correctly earn points.
   - Try the whole class or small groups with 1 adult / group.
   - At the end of the game it’s talking time until the ‘LISTEN’ cue eg. a special word, sound, action or routine. What will we agree on today? eg. A pet name, noise or mime.
- Listening time again: a longer message or more children in the group.
- Those who speak have to sit out… like musical chairs.
- Listening grand final…. Who can get the message right every time? Points & highlight stickers.

4. **GOOD listeners in the whole group / small groups.**
   Games to try…
   - Recognition of environmental sounds… All listen, teacher describes, chn guess.
   - Guess the sound…. 2-3 chn turn away, others make a sound, the chd who identifies the sound makes the next sound.
   - Guess the person… 1 child turns away… teacher points to children 1 at a time to say a simple phrase eg. ‘I have a pet turtle’. If the first child identifies the speaker, they swap roles.
   - Copy the rhythm… teacher models, children copy. Those making errors or noise are ‘out’… keep playing to find a listening champion.
   - Add to the list (a variation on Grandmother went to market). Each child says, “I have a pet _____”, the next child repeats that message, using the first child’s name and pet and then adds his/her own pet. The idea is to keep the list going until children forget what they heard. Keep playing to find a new listening champion.
   - Listen for a key word form a shared book eg. “Bertie” in the “Bertie the Bat story”. Every time that word is said, the children have to clap, put their hand up, flap their bat wings etc.

**CONVERSATIONS WITH MY PET. Transition to writing.**
- Writing idea… talk about listening to our pets talk.
- What would they say? What would we say?
- Work in groups to TAKE-TURNS to tell our stories briefly. Those ready to write begin, those needing ideas LISTEN to peer and adult models.
- Recall models, listen to the number of words, model the written text, focus group writing of a conversation with a pet.
- TIME to listen to each other’s work. Recall good listening.

Carmel Bochenek & T1P, 7/00.
Appendix N

A visual representation of theory and context for this research, Chapter 1

Teachers' beliefs about language development practices in early childhood classrooms:
Stimuli for research questions

**Early childhood classrooms are complex research contexts:**
- Developmentally appropriate curriculum,
- Integrated curriculum,
- Individual learning styles,
- Students' strengths & needs,
- Language-based educational risk,
- Assessment, teaching & learning,
- Teachers' strengths and needs.

**Frameworks for teacher decision-making:**
- Personal construct theory,
- Social judgement theory,
- Naturalistic generalization,
- Teacher judgements,
- Specialist input,
- School-based change processes (CBTD, peer coaching etc.),
- Collaborative decision-making processes,
- Other.

**Individual teachers... theories, beliefs, experiences & practices?**

**Research Questions:**

1. To what extent do teachers' personal constructs of language-based educational risk determine their pedagogy for students at risk?

2. Which influential factors shape early childhood teachers' thoughts and pedagogy for students at educational risk?

3. What are the implications of the co-construction of classroom language development plans for effecting transitions in teacher thought and pedagogy?
References


**Disorders: An introduction for community-based rehabilitation workers.**
Hong Kong: University Press.


medicine and teaching. In D. C. Berliner, & B. V. Rosenshine (Eds.),
*Talks to teachers* (pp.369-386). New York: Random House.


Oaks, CA: SAGE.


